

DWR MISSION

Statement

To manage the water resources
of California in cooperation
with other agencies,
to benefit the State's people,
and to protect, restore,
and enhance the natural
and human environments.

S T A T E O F C A L I F O R N I A • D E P A R T M E N T O F W A T E R R E S O U R C E S

DWR NEWS/People
Public Affairs Office
1416 Ninth Street, Room 252-21
Sacramento, CA 94236-0001

DWR NEWS | *People*

SPRING 2007

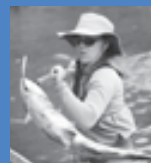
*In Honor of
DWR Employees
Tim Crawford and
Martin Alvarado*



Delta Vision
Page 8



Levee Repairs
Page 15



Feather River
Fish Program
Page 20



Edmonston's
Pump
Page 25



Governor Schwarzenegger has called for major progress in California water policy developments and innovations over the next decade. DWR will play a lead role in this challenging plan that will require a new investment of nearly \$6 billion.

More storage via two new reservoirs, stronger levees, Delta enhancement and modernized water resource management are proposed to better serve the people's needs, protect California's environment and keep the Golden State's economy vibrant.

2006 Progress

After achieving extensive Central Valley levee repairs on an urgent basis in 2006, the Governor persuaded voters at the November 2006 election to approve about \$5 billion for flood protection upgrades.

Propositions 1E and 84, approved by the voters, provided \$4.9 billion for flood management, largest such investment in State history, and about \$1 billion for integrated regional water management, including wastewater recycling, groundwater storage, conservation and other water management actions.

DWR is intimately involved in applying these 2006 bond funds to enhance flood protection, as shown by our creation of a strategic initiative called Flood Safe California to invest funds wisely and the bond expenditure implementation plan we've crafted for the Governor to assure efficiency in building and fiscal accountability.

The flood safety bonds were part of the first phase, \$37.3 billion Strategic Growth

Plan (SGP) to meet future needs of the nation's most populous and still-growing state. That package was approved by voters in November, 2006.

2007 Proposals

In January, the Governor sounded a new water charge in his 2007 State of the State speech. He proposed almost \$6 billion in new funding in water infrastructure and for innovative operations, starting in his second term. The water funding is part of the second phase SGP, totaling \$43.3 billion in added infrastructure bonds.

DWR is a key agency in this bold, robust strategy. We'll help carefully plan, build and develop California's infrastructure and water programs to a level adequate to meet future needs of the nation's most populous, and still growing, state. We'll also apply innovations in operating the State Water Project and other water management programs to adapt to climate change and shifts in precipitation patterns.

In his State of the State address, the Governor proposed a 2008 bond measure of \$5.95 billion for water supply, flood management and conveyance. The lion's share (\$4.5 billion) will go to create two new reservoirs for water storage, probably an off stream facility near Sites in Colusa County and at Temperance Flat on the San Joaquin River, east of Fresno. These reservoirs will provide an added 500,000 acre-feet per year to California's water supply, while improving flood protection and delivering more water for fisheries management and wildlife refuges.

California must expand its water management and delivery system, including

surface storage, groundwater storage and conveyance facilities to cope with rising population and increased uses in her diversified and expanding economy.

The \$5.95 billion will be divided: general obligation (GO) bonds will provide \$3.95 billion while revenue bonds will provide \$2 billion. This means that the cost would be shared by the public and by water supply entities.

A \$1 billion GO bond investment for Delta sustainability is planned to help implement a sustainable resource plan for the Sacramento – San Joaquin Delta. This vast estuary is California's most significant source of drinking water, serving at least some water needs of 23 million Californians, as well as providing fish habitat and other environmental values and recreational attractions.

The plan also includes significant investments of \$250 million for Water Resources Stewardship benefiting the Klamath River, a historically valuable salmon river in a farm irrigation region, and the Salton Sea, a Southern California desert lake prized as a flyway habitat for about 400 wildlife species, especially waterfowl. Both systems have shown stress in recent years and require ecosystem assistance.

Recent Year Flood Safety Upgrades

The Governor has taken a vigorous role in water planning, especially since the June 2004 flooding of Upper Jones Tract in the Delta dramatized the vulnerability of our aging levee system and the potential for Delta levee collapses from earthquakes. In recent years, the Governor has beefed up DWR's flood management budget. General Fund support for DWR flood management has grown from

\$14.4 million in 2004–2005 to \$55.3 million in 2006–2007. Assembly Bill 142 provided an added \$500 million to fund urgently-needed flood protection projects throughout the State.

Following the Governor's February 2006 emergency declaration for the flood system, repairs were speedily done on 33 critical erosion sites in the Central Valley. The State is now advancing funds and working with the federal government to repair 71 additional levee erosion sites damaged in last year's floods. Further, a very extensive program to evaluate 350 miles of urban levees in the Central Valley for hidden defects is underway.

DWR reports, such as the January 2005 "Flood Warnings: Responding to California's Flood Crisis", have been influential in focusing government and public attention on the need for flood management action and recommending policy improvements.

Back to the Future

Climate change and its emerging influence on snowpack, rainfall and runoff in California are already considered in how DWR operates reservoirs, tracks precipitation, estimates runoff, studies supply and makes delivery estimates.

And, as I assured an all divisions gathering of about 300 SWP staffers late last Fall, California's SWP, an historic public works achievement from the 1960's, will continue to fulfill its vital water supply and delivery role as a crucial element fueling California's dynamic economy and future-oriented lifestyle.



Lester Snow

Director

Department of Water Resources

April 2007

Arnold Schwarzenegger
Governor

Mike Chrisman
Secretary for Resources

Lester Snow
Director, Department of Water Resources

Susan Sims
Assistant Director for Public Affairs

Margarita Macias
Editor

Contributing Writers:

Valerie Holcomb	Soheil Loghmanpour
Amy Norris	Annie Parker
Rick Ramirez	Don Strickland
Ted Thomas	Anna Torres
Sean Walsh	Pete Weisser

Design:
Page Design Group

Photography:
DWR Photography Unit

DWR NEWS/People is published quarterly by
the California Department of Water Resources.

Please send questions,
comments, or story ideas to:

DWR NEWS/People
Public Affairs Office
Department of Water Resources
1416 Ninth Street, Room 252-21
Sacramento, CA 95814

Email:
dwrpeople@water.ca.gov

Phone: (916) 653-8743

DWR NEWS/People's Web site is
[http://www.publicaffairs.water.ca.gov/
dwrnewsletter/](http://www.publicaffairs.water.ca.gov/dwrnewsletter/)

Funded by the State Water Project Contractors

 Printed on recycled paper



TABLE OF CONTENTS

FEATURE ARTICLES

Cover Story: In Honor of DWR Employees Tim Crawford and Martin Alvarado.....	5
Delta Vision	8
FERC Issues Annual License for Oroville Facilities	14
Levee Repairs and Floodplain Management in California.....	15
Feather River Fish Program	20
"Dirty Jobs" Visits Oroville	24
Edmonston Pumping Plant Pumps Being Replaced	25

STATE WATER CONTRACTOR PROFILE

San Geronio Pass Water Agency	28
-------------------------------------	----

NEWS IN BRIEF

Stocking of Steelhead trout in Oroville.....	30
Angeles Tunnel Ten-Year Inspection Project Completed at Castaic Lake	30
Future Years Look Busy for State Water Programs.....	31
New Law Protects SWP Right of Way	32

PEOPLE PROFILES

New Assignments: Reuben Jimenez	33
New Assignments: Tim Garza	34
Pushing for Health	35
DWR's Tours Coordinator Michael Miller Hosts Tour Groups from Around the Globe	36
DWR Engineer is a Part of a Patent that Provides Cost-Effective Water.....	38

DWR AWARDS

DWR Annual Awards	39
DWR Apprentice Grads of 2006	43
Training 2006 Awards.....	44
Twenty-five Years of Service	46
Professional Exam Graduates	47

DWR PEOPLE NEWS

Academic Achievements	48
Birth Announcements.....	48
Retirements.....	48
New Hires	49
Promotions	52
Obituaries	53

IN HONOR OF DWR EMPLOYEES

Tim Crawford and Martin Alvarado

DWR San Luis Field Division employees **Martin Alvarado** and **Tim Crawford** lost their lives on February 7, 2007 during an underwater inspection for Quagga Mussels at the Dos Amigos Pumping Plant in Merced County.

"Our deepest sympathies and prayers go to the families of these two men, and to their fellow employees who are grief-stricken at this tragic loss," said DWR Director Lester Snow. "Our divers routinely perform hazardous duties in connection with State Water Project operations. They are well-trained, highly-qualified individuals who approach their tasks with a 'safety first' attitude."

On February 8, 2007, Governor Schwarzenegger ordered the flags at the State Capitol flown at half staff, in honor of Tim and Martin. The flags were later presented to the families by Director Snow and Deputy Director Ralph Torres.

"Martin Alvarado and Tim Crawford gave their lives serving the people of California to keep us safe and the State's water system secure. They were highly qualified and dedicated to their professions. Words cannot express the gratitude we owe them nor the profound grief Maria and I share with their family, friends and co-workers," said Governor Schwarzenegger.

DWR officials are working with safety authorities to determine the cause of the accident. Both Martin and Tim were Utility Craftworkers, who were part of DWR's 13-member dive team. The divers routinely inspect facilities along the State Water Project. Tim was one of the most experienced DWR divers and had been part of the dive team for more than 18 years. Martin joined the team in 2006.



IN REMEMBRANCE OF TIM CRAWFORD

Tim Crawford, 50, of Seaside, had worked at DWR for more than 18 years.

Tim, was born in San Bernardino and graduated from Apple Valley High School in 1974, later moved to Hawaii, where he enjoyed his hobby of surfing. He then moved to Alaska, where he worked for an oil company.

"Tim was my best friend and like a brother to me. He was a wonderful human being, a kind, soft-spoken, light-hearted individual who would give you the shirt off his back," said Southern Field Division Senior Hydroelectric Plant Operator **Jesus Salazar**, who was Tim's best friend since elementary school.

In March of 1988, Tim's DWR career began at Southern Field Division's Castaic Yards Building and Grounds Section as a Utility Craftsworker. A year later, he transferred to San Luis Field Division. At San Luis, Tim was a Utility Craftsworker for the Buildings and Grounds Section. He had a thirst for knowledge and was always eager to take on a new task. He was a certified diver and dive supervisor but also a water treatment plant operator, certified crane operator, certified herbicide applicator, and a certified backflow tester. In December of 2001, he received a Certificate of Appreciation in recognition of his exceptional service, outstanding contributions, and cooperative efforts associated with the emergency Aqueduct Repair at Mile 4.25.

Known for his ever present smile, Tim is remembered for always reacting calmly in every situation. Tim shared his love of life with everyone around him. He enjoyed golfing, kayaking, recreational diving, surfing, and sky diving. "Tim

didn't like being in the spotlight or in large crowds," said **Pete Rigali**, Southern Field Division Utility Craftsworker and Dive Team Supervisor who worked with Martin and Tim during the last seven years. "Even in his passion for surfing, Tim always searched for surfing locations where there were few people. He really enjoyed surfing with his buddies near Seventeen Mile Drive."

Tim was a loving husband and father and is survived by his wife Roxanne, and son, Shawn, and his parents. Tim would regularly spend time near the ocean with his wife and their golden retrievers, Toby and Kelly. Private services were held near the ocean.

"Tim and Martin were really upbeat and hard workers. They were the cream of the crop," said Rigali. "The Department will never be able to replace them."

"Martin and Tim touched the hearts of many and will be greatly missed by all who had the honor and privilege of knowing them," said **Jim Thomas**, Chief of San Luis Field Division. ■



Tim Crawford at Dos Amigos Pumping Plant

IN REMEMBRANCE OF MARTIN ALVARADO

Martin Alvarado, 44, of Coalinga, had worked at DWR for six years. He was born in Lemoore and grew up in the Central Valley, graduated from Coalinga High School in 1982, and attended West Hills College. Martin worked as a certified welder and a mechanic before joining DWR in 2001.

"Martin was an excellent welder and was probably one of the best welders in San Luis Field Division," said **Pete Rigali**, Southern Field Division Utility Craftworker and Dive Team Supervisor who worked with Martin and Tim during the last seven years. "When he entered DWR's Apprentice Program, he could weld better than me and I was supposed to teach him."

As a Utility Craftworker at the Coalinga Operations and Maintenance Subcenter, Martin worked on the California Aqueduct. His career began as a Maintenance and Service Occupational Trainee in January of 2001. He became a Service Assistant in July 2001 and a Utility Craftworker Apprentice in November 2001. He graduated the Apprentice Program in November of 2004, as a Utility Craftworker.

According to many of his coworkers, Martin met each day with enthusiasm and a desire to learn and to achieve in all aspects of life. Martin served as a mentor for apprentices in San Luis Field Division and he was always willing to share his knowledge with fellow coworkers. Martin's latest achievement

was on February 6, 2007 when he received his third crane certification with DWR.

"As a husband and father of seven, Martin's greatest pride came from his family. He always had a story to tell about his family gatherings, cheering on the Raiders, bike riding from Rosarito to Ensenada and fishing in Monterey with his brothers," said **Dave Paulson**, Chief of the Flood Operations Branch and Dive Team member. Martin is survived by his wife Sara;

daughters Stephanie, Jacqueline, Justina, Vivian, and sons Martin, Fabian, and Angel. He is also survived by his parents and 10 brothers and sisters. Services for Martin were held on February 13, 2007 at St. Francis Cabrini Church in Huron. ■



Martin Alvarado at Buena Vista Pumping Plant

Trust funds have been set up for both families with Bank of America in the following names: *Tim Crawford Memorial Trust Fund* and *Martin Alvarado Memorial Trust Fund*. Those wishing to make deposits to these trust funds will need to reference the following account numbers when visiting any Bank of America branch: **Martin Alvarado 00178-61243 and **Tim Crawford 00178-61224**.**





DELTA VISION

By Valerie Holcomb

As the hub of the California water system, for decades the Delta has also been the center of conflict and controversy. In the early 1990s, many were declaring the Delta “broken.” In 1995, the CALFED Bay – Delta Program was created to develop long-term solutions for the Bay – Delta estuary, with a focus on water supply, water quality, the environment and levees. The participation of both State and federal agencies and hundreds of stakeholders was key to the development of the program, and important to its long-term implementation.

After five years of hard work, negotiation and compromise, the 30-year plan to solve the Delta’s problems was released, and work on Phase 1 commenced. However, growing concerns about the CALFED plan’s efficacy in solving the Delta’s problems were aggravated by levee failures, continued decline in some fish populations, lawsuits, and the looming impacts of global warming. Growing consensus among scientists is that current uses and ecosystem of the Delta are not sustainable under current management practices and regulatory requirements.

As part of his May 2005–2006 Budget Revision message, **Governor Schwarzenegger** called for an independent fiscal and management review of the program by the Little Hoover Commission, the State Department of Finance and the private consultancy KPMG.

A key recommendation of the independent review to revitalize CALFED is to create a “100-year Delta Vision.” On September 28, 2006, Governor Schwarzenegger signed legislation and Executive Order S-17-06 to initiate Delta Vision.

The Delta Vision will build on work done through the CALFED Program, which will continue to focus on water supply and ecosystem restoration. An important difference is that Delta Vision will encompass the Delta’s full array of infrastructure and land use resources.

Cranes in the Delta.

"Delta Vision is broader because of the growing realization that changed conditions – land use, infrastructure, transportation – and difficulties in achieving the objectives of the CALFED ROD under these changed conditions, such as global warming, that the Delta isn't sustainable and not likely to be," says **Leo Winternitz**, Deputy Director of Strategic Planning. "There's an old Chinese proverb that I repeat often: 'Unless you change your direction, you're apt to end up where you are headed.' Delta Vision gives us an opportunity to step back and look where we are headed."

Delta Vision

Delta Vision encompasses a broad range of interests: environment, land use, transportation, utilities, water supply and quality, recreation and tourism, flood risk management, emergency response, and local and state economies. It also explicitly includes Suisun Bay and Marsh.

The first task, due January 1, 2008, is to develop a vision for a sustainable Delta that recommends priority uses and services that should be protected and managed in a sustainable manner. The Strategic Plan outlining recommended measures to implement the vision recommendations is due December 31, 2008.

In Executive Order S-17-06, the Governor established the Delta Vision Committee to oversee the process and ensure support to a Blue Ribbon Task Force and Stakeholder Coordination Group. The committee will select science advi-

> > > continued on next page



CALFED Bay-Delta Program Director Joe Grindstaff presents the Delta plans during a "Delta Workshop."

NEW POLICY INSTITUTE DELTA REPORT REINFORCES DELTA VISION PROCESS

A major new report recommending alternative solutions to Delta environmental problems is seen as reinforcing **Governor Schwarzenegger's** Delta Vision process.

The report by the Public Policy Institute of California (PPIC) evaluates water supply, environmental impacts and fiscal costs, recommending alternative paths to future Delta management and improvement. The 324-page report was issued February 7, on the same day the governor announced seven appointments to the Delta Vision Blue Ribbon Task Force. Names of Task Force members are listed below.

"We must continue to support the environmental and economic functions of the Delta that are vital to the people of California," said Schwarzenegger.

The PPIC study can be helpful to the blue ribbon task force members, said Resources Secretary **Mike Chrisman**.

DWR Director **Lester Snow**, who served as CALFED's first Executive Director from 1995 to 1999, agreed.

"The PPIC report is a helpful, innovative resource document in the complex but necessary struggle to revitalize the Delta for the 21st Century," said Snow. "This study can help focus stakeholders and policy-makers on realistic strategies to renew this vital, but troubled estuary."

Recognizing the Delta's special role in supporting California's environmental and economic resources, Governor Schwarzenegger in September 2006 signed an executive order to develop a Delta Vision to provide a sustainable management program for the Delta. The Delta Vision process, now underway, will be instrumental in developing a plan to deal with the challenges facing the Delta now and in the future. ■

sors and members of the Stakeholder Coordination Group, look for funding opportunities, review the Task Force Vision and Strategic Plan recommendations, and provide recommendations to the Governor. Resources Secretary **Mike Chrisman** chairs the committee. The Secretaries of the Business, Transportation and Housing Agency, Department of Food and Agriculture and the California Environmental Protection Agency, along with the President of the Public Utilities Commission serve on the committee.

An independent Blue Ribbon Task Force has been appointed by the Governor to recommend future actions to achieve a sustainable Delta. The Task Force consists of seven individuals with demonstrated experience and expertise in addressing and resolving complex natural resource management issues. They will meet and deliberate in noticed public meetings. Their task is to identify priority functions, values and services provided by the Delta; recommend a sustainable vision for the Delta; and recommend measures to implement the vision.

The Stakeholder Coordination Group involves local government, stakeholders, scientists, engineers and members

of the public in the Delta Vision effort. Members will provide comments to the Delta Vision Committee and Blue Ribbon Task Force. The Stakeholder Group held its first meeting in March.

The work of the Stakeholder Group is of particular interest to Winternitz. In 2001, he left DWR to lead the Sacramento Area Water Forum, a diverse group of 40 stakeholder organizations representing business, agriculture, citizens groups, environmentalists and water managers who collaboratively negotiated a regional water supply and environmental protection agreement. "I've walked in those shoes, and I try to look at it [Delta Vision] through stakeholder eyes."

Winternitz will coordinate the work of the Stakeholder Coordination Group (SCG). One of his goals is to establish a roadmap for the SCG, from the group's first meeting to the end point – recommendations to the Blue Ribbon Task Force.

"The Blue Ribbon Task Force is pretty independent. But there are lots of issues associated with the care and feeding of stakeholders' groups," he says. "We're asking for a significant amount of their time. We need to develop a process that uses their time efficiently and wisely."

Boating is popular along the Delta.



A process that ensures successful stakeholder meetings and interactions will result in recommendations that can be supported by a majority of stakeholders. And, Winternitz believes, the value of the stakeholders' contribution will be increased to the extent that they can "reach agreement on a set of common recommendations."

Kamyar Guivetchi would agree. He also has a strong interest in the stakeholder process. As DWR's Manager for Statewide Water Planning, he recently completed work on the 2005 California Water Plan Update, and has started work on the 2009 Update. He will coordinate DWR's participation in Delta Vision.

Guivetchi believes that the California Water Plan Update Public Advisory Committee – 65 members from highly diverse membership-policy, technical, State, federal, local, private – paid real dividends and he brings this perspective to Delta Vision. The Water Plan Update is a strategic document, similar to the Delta Vision work product. While the Water Plan's Public Advisory Committee is advisory, the members knew that the things they agreed on were likely to make it into the final plan. When the Water Plan Update was completed, the Advisory Committee produced a short document in which they identified areas of agreement, differences and uncertainties that needed to be addressed in the future. This document was presented at the public comment workshops for the Water Plan Update. Guivetchi thinks a similar product from the Delta Vision Stakeholders Group would be useful.

"Volunteering to work on Delta Vision felt like going home," says Guivetchi. "It marries my technical background in the Delta and Suisun Marsh with our stakeholder participation efforts in the California Water Plan." Guivetchi joined DWR in 1978 as a student assistant in the Delta Studies Branch. He worked at the fish screen testing facility at Hood, the planned origination point of the Peripheral Canal. During the 1990s he worked on DWR's Suisun Marsh program.

Guivetchi has convened a "matrix team" of DWR staff working on Delta and Suisun-related projects that will feed into Delta vision. The intention is to keep DWR staff aware of Delta Vision, and rely on their expertise to review materials and keep Delta Vision aware of their related projects. His goal is to harness the contributions of individuals to inform the bigger process and products of the Blue Ribbon Task Force. Conversely, the products of Delta Vision will be important to the 2009 California Water Plan Update.

JOHN KIRLIN IS EXECUTIVE DIRECTOR OF DELTA VISION PROGRAM

On March 1, 2007, **John Kirlin** became Executive Director for the Delta Vision Program. Prior to his appointment, Kirlin was the Executive Director for the California Marine Life Protection Act (MLPA) Initiative, an innovative public-private policy implementation initiative.

With more than 30 years experience analyzing policies, administration and financing directed at complex public problems, especially in California, Kirlin's areas of deepest policy expertise include state-local fiscal relationships, regional governance, land use, and environmental and species protection policies. As a consultant to local government associations, he served on matters related to State-local fiscal affairs and other policies and to California State agencies on subjects ranging from species protection to oversight of local government debt and the interface of energy and environmental policies.

Kirlin served as a consultant to financial institutions on municipal debt markets and to civic organizations seeking to improve regional governance in Southern California. Through the National Academy of Public Administration, of which he is an elected fellow, he has served as an advisor on environmental policy to the United States Congress and to the United States Environmental Protection Agency.

He held a faculty position in public administration at the University of Southern California for nearly 30 years and then served as a faculty member at Indiana University-Purdue University Indianapolis for five years. As a professor, he authored, coauthored or edited several books and nearly a hundred articles on topics ranging from broad administrative theory through fiscal limits to municipal services. He was founding editor of the annual volume, "California Policy Choices (1984-1995)."

Kirlin has an agricultural background, having grown up on a farm in Iowa. He owns a vineyard in Napa. ■

> > > continued on next page

Who's on First?

It is generally acknowledged that it can be difficult keeping track of the different entities and Delta-related activities.

"CALFED will continue. I don't think anything can wait," says Winternitz. He identifies three main concurrent efforts. "Delta Vision is big picture. CALFED Stage 1 looks at water. BDCP [Bay – Delta Conservation Plan] addresses environmental assurances." The BDCP is a conservation plan prepared to meet the requirements of the Federal Endangered Species Act (FESA), California Endangered Species Act (CESA) and/or the Natural Community Conservation Plan Act (NCCPA).

Three key building blocks of information will be presented to the Blue Ribbon Task Force for their first phase of work:

1. Stakeholder Assessment Report, detailing the spectrum of interests, areas of agreement, disagreement, uncertainties and information gaps identified by the stakeholders.
2. Delta-Suisun Status and Trends Report, which outlines what's known about current conditions related to systems and services and, based on today's management and key drivers of change, the trends over next 100 years.
3. Delta Risk Management Strategy (DRMS, pronounced "Dreams") quantitative risk assessment looking at various scenarios for levee failures, and the economic and environmental consequences. The final DRMS report will outline risk reduction strategies, impacts and benefits.



Chair of the Delta Vision Task Force Phil Isenberg speaks during Delta Vision Stakeholder meeting on March 5 at the Sterling Hotel in Sacramento. California Secretary for Resources Mike Chrisman listens at right.

In addition, there are literally dozens of local and regional planning activities, including city general plan updates, residential and commercial developments, flood control and levee maintenance, railroad projects, new parks, Integrated Water Resource Management planning, habitat conservation plans, utilities projects. One of the Delta Vision goals mandated by the Governor is to inform and be informed by these planning efforts.

"All activities in the Delta are integrated, but what's important enough to include and how do you prioritize?" says Winternitz. "General plan updates could be significant to land use discussions. Which are the important transportation corridors? The Blue Ribbon Task Force and the Stakeholders group need to be aware of them."

Thinking Outside the Box

Perhaps thinking creatively about the Delta is the biggest challenge posed by the Governor to Delta Vision. To assist that effort, the nonprofit Water Education Foundation is holding a series of workshops on the Delta. Results of these workshops are posted on the WEF Web site, www.watereducation.org.

In October 2006, the University of California, Berkeley's Delta Initiative hosted a two-day planning charrette, which the State's Delta Vision program helped fund. A charrette is a brief, intense workshop or planning session in which stakeholders, planners and others collaborate on a vision for development. The UC Berkeley "Great Delta Charrette" focused on identifying spatial patterns of land use, infrastructure and levee modifications that would create "a resilient Delta" in 50 years time in a multi-part gaming exercise. Participants worked in small teams to develop a vision of the Delta. The full charrette report is available at <http://www.deltavision.ca.gov/research/deltacharrette.cfm>.

DWR has asked UC Berkeley to develop a proposal to expand the charrette process for the Stakeholder Coordination Group. Guivetchi sees it as an ideal way to "break the ice" as the individuals from different perspectives are teamed together to develop alternative Delta visions. The tentative plan is to hold the charrette in June, after the DRMS Risk Assessment report is released. ■

THE DELTA VISION BLUE RIBBON TASK FORCE

In February, Governor **Arnold Schwarzenegger** appointed the Delta Vision Blue Ribbon Task Force, which includes **Phillip Isenberg, Monica Florian, Richard Frank, Thomas McKernan, Sunne Wright McPeak, William Reilly** and **Raymond Seed**.

Chair of the Delta Vision Task Force **Phil Isenberg** of Sacramento is a Democrat and has served as President of Isenberg/O'Haren Government Relations. He is a prominent lobbyist, a former assemblyman and former Mayor of Sacramento.

Monica Florian of Huntington Beach is a Republican and was Senior Vice President for the Irvine Company. She is a former member of the Nature Reserve of Orange County, Upper Newport Bay Watershed Executive Committee and the California Council for Environmental and Economic Balance.

Richard Frank of Sacramento is Executive Director of the California Center for Environmental Law and Policy at Boalt Hall School of Law at the University of California, Berkeley. He is a former Chief Deputy Attorney General for Legal Affairs at the California Department of Justice and is a member of the Planning and Conservation League.

Thomas McKernan of Arcadia is a Republican and Chief Executive Officer of the Automobile Club of Southern California and Auto Club Enterprises. McKernan is the Chair of the California Business Roundtable and serves on the board of the California State Chamber of Commerce.

Sunne Wright McPeak of Pleasanton is a Democrat and former Contra Costa County supervisor. She is President and CEO of the California Emerging Technology Fund. She was Secretary of the Business, Transportation and Housing during 2003–2006. She was formerly President and Chief Executive Officer of the Bay Area Council, where she was active on regional issues.

William Reilly of San Francisco is a Republican and a founding partner of Aqua International Partners, under the Texas Pacific Group. Reilly served as the seventh U.S. Environmental Protection Agency Administrator.

Raymond Seed of Walnut Creek is a Professor of civil and environmental engineering at the University of California, Berkeley. He played a prominent role in studying the levee failures in New Orleans after Hurricane Katrina. ■

FERC ISSUES ANNUAL LICENSE FOR OROVILLE FACILITIES

On February 1, 2007, the Federal Energy Regulatory Commission authorized continued operation of the Oroville Facilities under terms and conditions of the original 50 year license that expired on January 31, 2007. The authorization is for a period up to one year, and additional annual licenses will automatically be issued in the future until a new license is issued, or FERC decides otherwise.

The annual license was not unexpected according to Program Manager **Rick Ramirez**. "FERC published schedules last year indicating that it did not anticipate issuing a new license by the expiration date of the original license" he explained. **Pete Scheele**, Oroville Field Division Chief, says "Operationally, there is little impact to DWR since it's essentially business as usual during an annual license period, but we continue to work hard to get that new license".

Before it can issue the new license, FERC must complete a Final Environmental Impact Statement and receive Biological Opinions from the National Marine Fisheries Service and US Fish and Wildlife Service under the Endangered Species Act. DWR must also complete an Environmental Impact Report in order to receive a Water Quality Certification from the State Water Resources Control Board. Some of these processes were delayed to give stakeholders additional time to reach an agreement while others have taken longer to complete simply because of the number and complexity of issues to analyze.

The March 2006, Settlement Agreement among stakeholders and agencies is designed to facilitate the remaining process through consensus on tough issues. According to **Ralph Torres**, Deputy Director, "There is strong hope that multiple annual licenses will not be needed, so the benefits of the Agreement, as reflected in a new license, can flow through to stakeholders. However, non-settling parties can use the various regulatory and judicial forums to seek additional treatment of their issues, so the schedule is not exactly under our control."

DWR and the signatories to the Settlement Agreement were encouraged when FERC staff recently issued a Draft

Environmental Impact Statement with a recommended alternative that accepted most of the Settlement Agreement proposals. The US Forest Service, while not signing the Settlement Agreement, also issued final conditions to be included in a new license that are consistent with the Settlement Agreement. Ramirez believes "these milestone decisions tell us that the Settlement Agreement is holding up well through the remaining steps to produce a new license."

Despite the delay in receiving a new license, the hard work put in by DWR over the last seven years is not going unnoticed. Deputy Director Torres and Ramirez were invited to Oroville where they received a Partnership Award from the City in recognition of DWR's extraordinary efforts in addressing local concerns during the relicensing process. DWR was also invited to submit an article in a national publication sharing lessons learned from the collaborative efforts DWR undertook to reach the historic Settlement Agreement. "We've also been aware that some of the documents produced during our collaborative process have been used to help jumpstart settlements in other relicensing processes", says Ramirez.

"DWR personnel involved in this effort have a right to be immensely proud of their work on this program," said Ramirez, who also was invited to lecture on the program to students at UC Berkeley's Boalt School of Law. He notes that "**Barbara McDonnell**, **Nick Kontos** and **Ward Tabor** have been extremely influential in the success we've enjoyed thus far. We've also been able to rely on the steadfast contributions from **Mark Andersen** and his team in the State Water Project Analysis Office. They have been the heart and soul of this program from day one. **Russ Stein** is leading the charge on our environmental documents, while **Bill Cochran** from the Oroville Field Division is marshalling his troops to ensure a smooth transition to the eventual issuance of a new license."

It will continue to be a very busy year for the program, as it addresses the remaining process milestones, but DWR has positioned itself very well to ensure a favorable outcome for all the interests that rely on the Oroville Facilities. ■



LEVEE REPAIRS

and Floodplain Management in California

By Margarita Macias

Working with the U.S. Army Corps of Engineers (Corps) and local Reclamation Districts to better protect California from flooding, the Division of Flood Management is repairing 104 levee sites from Colusa to Chowchilla. In addition, field explorations continue on 350 miles of State-federal project urban levees in the Sacramento and San Joaquin valleys. "Urban levees" protect 10,000 or more people.

Compounding this backlog of critical repairs, was the January 2007 announcement by the Corps that 146 levees throughout the United States are at risk of failing during a major flood. California had 42 levees on this list, the most of any state. As the list of levees requiring repairs increases, DWR's Levee Repairs and Floodplain Management Office continues to play a major role in improving California's flood management system.

Background

Hurricane Katrina's disastrous flooding of New Orleans in 2005 dramatized the need for improving California's levee system. In late 2005, 24 critical erosion sites were identified in Colusa, Sacramento, Solano, Sutter, Yolo, and Yuba counties. These sites were repaired by a special team led by **Don Kurosaka**. During the spring and summer, nine more sites were added totaling 33 critical sites. On February 24, 2006 Governor Schwarzenegger declared an emergency and directed DWR to repair the 24 sites and to identify other critically damaged levees.

After the January and April 2006 floods damaged levees throughout the Sacramento and San Joaquin flood control systems, the Corps identified 47 sites that were critically damaged and eligible for federal rehabilitation assistance

Above, Left to Right: Chief of the Levee Repairs and Floodplain Management Office Mike Inamine, Chief of the Critical Repairs Branch Tirath Pal Sandhu, and URS Corporation's Project Manager Loren Murray standing during an inspection at Sacramento River Mile 182.

>>> continued on next page

under Public Law 84–99. Furthermore, in late summer an additional 24 critical erosion sites were identified, increasing the total new sites to 71. Combined with the 33 sites already under repair by DWR and the Corps under the effort led by Kurosaka, DWR was now repairing 104 sites. Even as construction began and continues throughout 2006–2007 on these critical sites, repair work on 341 additional sites are expected to be scheduled.

Leading the Repairs

In summer 2006, DWR created the Levee Repairs and Floodplain Management Office (LRFMO) led by **Mike Inamine**. In a team effort, 11 DWR staff along with several other agencies, Reclamation Districts, and consultants – most notably URS Corporation–have spent the last year repairing and evaluating California’s levee system.

“Flood protection in California has historically been underfunded, piecemealed, and as a result, was often poorly executed,” said Inamine. “However, due to heightened

Structural work on the initial 33 critical erosion sites was completed by DWR and the Corps by November 2006. DWR and the Corps have completed structural repairs on 48 sites. Design and construction work on the remaining sites will continue through summer 2007.

The Levee Repairs and Floodplain Management Office consists of three branches: Critical Repairs, Levee Evaluations, and Floodplain Management. All three work closely together to protect California from future flood events.

Coordinating the Critical Levee Repairs

The relatively limited staff of the LRFMO was required to coordinate a tremendous amount of work.

Pal Sandhu, Chief of LRFMO’s Critical Repairs Branch, URS Corporation’s Project Manager **Loren Murray** and **Rob Fill**, Chief of Levee Repair Project Headquarters, worked together to see the completion of these levee repairs.

*“...underfunded,
piecemealed and as
a result, was often
poorly executed.”*
— MIKE INAMINE



awareness following the New Orleans disaster, California received much needed funding through Assembly Bill 142, and Propositions 1E and 84.”

With funding from AB 142, Inamine and his team in Flood Management’s Levee Repairs and Floodplain Management Office took the lead on the new 71 levee repairs.

Above, Left photo: Drillings to evaluate the 350 miles of State-federal project levees began in November of 2006.

Right Photo: DWR Deputy Director Les Harder (at left) and URS staff review samples taken during levee evaluations.

Since joining DWR in 1993, Sandhu has worked as the Flood Operations Center’s nightshift director, Chief of the Modeling Studies Section and Flood Management’s Chief of Integrity and Inspections Branch. He helped create new inspection procedures and levee inspection reports.

Due to the large number of levee sites, winter weather, and a compressed schedule, repairs were phased in two parts to allow work to begin before final designs were completed in 2007.

“Phase one was to complete the repairs through the winter season and phase two included the environmental mitigation

work,” said Sandhu, who has worked 20 years in Ottawa, Canada helping to design several flood control projects.

In October of 2006, the planning and design phase of the project began with site inspections, field surveys, and collection of design information to complete structural and environmental designs on each of the 71 sites. In November of 2006, DWR staff led by Senior Engineer **Gwen Knittweis** with support from URS Corporation and the Corps consulted with resources agencies to enable the State and Corps to meet all environmental laws and permit requirements while maintaining the emergency schedule for construction. DWR also consulted with State environmental agencies to ensure this project met all State environmental requirements under CEQA and other State laws.

Sandhu and his staff of five regularly met with the Corps, Department of Fish and Game, U.S. Fish and Wildlife Service, National Marine Fisheries Service, State Water Resources Control Board, State Lands Commission, Sacramento Area Flood

Levee Repair Project Headquarters

DWR’s Levee Repair Project Headquarters (LRPH), created in 2006, was given the difficult assignment of setting up, staffing, and equipping an entirely new headquarters office at the same time it was preparing to administer over \$75 million in construction contracts at 16 repair sites managed by DWR. (The other eight sites in the original list were being repaired by the Corps using State funding.)

“We essentially had eight to ten months of construction to complete in four month’s time,” said Fill, who has 31 years of construction experience with DWR. “This wouldn’t have been possible without timely support from DWR management and without the professional staff and resources provided by our consultant, URS Corporation, and their subcontractors. We all worked long hours and weekends to successfully complete our original assignment on time and within budget. On top of that, we were given an additional 11 repair sites to negotiate and begin construction on while



Control Agency, the Governor’s Office of Emergency Services, and the National Oceanic and Atmospheric Administration.

“Each levee repair required at least 10 to 12 permits to begin construction,” said Sandhu. “Our goal was to establish structural integrity of the damaged sites. However, resources, such as trees, endangered plant species, and wildlife, must be protected.”

Following completion of structural repairs at all levee sites, the remaining work of planting, seeding, irrigation, landscaping, and plant maintenance will begin in spring 2007.

we were still attempting to finish our original 16 sites. It was all quite a challenge.”

Fill, who has extensive construction expertise from projects such as Coastal Branch Phase II and East Branch Extension Phase I, assisted in the creation of two field offices

> > > continued on next page

Above, Left to Right: (Left photo) During a Levee Repair Public Meeting in January 2007, URS Corporation’s Loren Murray makes a presentation. (Middle photo) URS staff takes samples during levee evaluations. (Right photo) Pal Sandhu of DWR explains levee repairs during a Public Meeting.



Left to Right: Chief Rob Fill and Gus Arce of DWR's Levee Repair Project Headquarters review list of levee repairs.

under LRPH. Operated by URS Corporation Construction Management staff, the North Field Office is located in Colusa and the South Field Office is located in Hood. Fill, located in Natomas, oversees the work of Chief of Contract Administration **Gus Arce** and several URS staff members at the headquarters office, along with over 20 URS employees in the field offices.

DWR Engineers **Scott Yomogida**, **Larry Lopez**, and **George Avila** also assisted with construction inspection on several of the sites. DWR's **Sam Sublett** also assisted with Contract Administration.

Of the 33 initial repairs, the most challenging include Sacramento River Mile 32.5R (Right Bank, when looking downstream), Cache Slough Mile 21.8R, Sacramento River Mile 141.4R, Bear River Miles 2.4L (Left Bank) and 10.1R, and Sacramento River Mile 26.5L.

"During the repair of Sacramento River Mile 32.5R, the contractor had the challenge of repairing nearly half a mile of the levee, avoiding numerous trees while placing extensive amounts of rock," said Arce, who has 26 years of working for DWR on several construction projects and contracts. "At Sacramento River Mile 26.5, this repair was in the middle of the town of Walnut Grove, creating logistical problems working around an existing bridge and dock."

Levee Evaluations

DWR's Flood Management staff is evaluating 350 miles of State-Federal project levees that protect urban areas in the Sacramento and San Joaquin valleys. This program seeks to identify "hidden" deficiencies that can result in catastrophic and deadly failures, such as the Arboga failure of 1997. This evaluation program consists of geotechnical exploration, laboratory testing, engineering and geological analysis, and preliminary design and cost estimates. URS Corporation teamed up with Fugro Corporation and GEI, and was awarded a three-year \$35 million contract on October 27, 2006 to assist DWR with these important investigations.

Under the direction of **Steve Mahnke**, Chief of the newly formed Levee Evaluations Branch, drilling operations began in the Marysville, West Sacramento, and Lathrop areas in 2006. The drilling began on November 27, 2006 in West Sacramento and Marysville. A total of 34 borings and 71 cone penetrometer soundings were completed in just over one month in 2006.

"Drilling started in April of 2007 in the Sutter County. Additional areas of study include Reclamation District 784, Sacramento, Davis, Woodland, and Stockton," said Mahnke, who has 17 years of geotechnical, environmental, construction, and material testing experience. "Most of these areas have had previous studies performed by either USACE or local agencies. In areas where studies have been performed, the first order of work is a thorough review of previous studies to assess if additional investigations are needed."

Tools that have been or will be developed to assist with the large quantities of data that are being generated include a gINT database (a geotechnical boring and laboratory database) and a geographical information system. The gINT database is being used and the GIS is in the development stages. Once completed, the GIS will be available for State, local and public use.

Floodplain Management

As levee repairs are being completed throughout California, Chief of the Floodplain Management Branch **Ricardo Pineda** and his staff of 20 continue providing technical advice to communities with floodplain management programs, working on detailed floodplain mapping studies throughout the Central Valley, and working with a consultant to develop a multitude of GIS products and related activities.

"With assistance from a FEMA grant, the Floodplain Management Branch along with a consultant is developing a comprehensive statewide levee database," said Pineda. "This new database with GIS application has received national attention and is being used as a model by other states and federal agencies."

During his more than 28 years in Flood Management, Pineda has worked during numerous flood events, including the floods of 1995, 1997, 1998, 2006, and Jones Tract flooding in 2004. Pineda is California's Coordinator for the National Flood Insurance Program managed by the



In Sacramento on February 23, 2007, Ricardo Pineda speaks during one of the eight Flood Safe California workshops held throughout California.

Federal Emergency Management Agency (FEMA). Pineda is also a Certified Floodplain Manager.

Pineda and his staff conduct 55 community audits per year and 16 public workshops to promote the National Flood Insurance Program.

"The demand for State funds to help improve flood safety is very high," said Pineda. "The cost of developing maps for California's floodplains is definitely much greater than the funds available."

Pineda along with **Daniel Yamanaka** of the Floodplain Management Branch worked on the initial AB 142 program to provide funding for levee repair work outside the Central Valley.

As part of the implementation team for the Flood Safe California initiative, Pineda assisted in developing programs to implement the regional flood management planning, the proposed California Flood Plan, and a new State Plan of Flood Control for the Central Valley.

"Development of the California Flood Plan and the new State Plan of Flood Control for the Central Valley will require a high level of coordination with stakeholders and updating

existing hydrologic, hydraulic, and economic models used to simulate the Central Valley Flood Control System," said Pineda. "Updating the models or developing new models will be a major undertaking for DWR and the Corps."

Flood Safe California's three goals are to reduce flood risk to Californians, their homes and properties, to develop a sustainable flood management system, and to reduce the consequences of floods.

In addition to playing a large role in eight public workshops, Floodplain Management staff will launch four new \$25 million engineering contracts related to floodplain mapping in 2007.

"The goal of these contracts is to assist DWR with its five year plan to update the FEMA approved Flood Insurance Rate Maps for the floodplains protected by the 1,600 miles of State-Federal levees in the Central Valley," said Pineda.

To learn more about DWR's levee repairs and floodplain management, visit the Flood Safe California Web site at <http://www.floodsafe.water.ca.gov/> ■

CHIEF OF LEVEE REPAIRS AND FLOODPLAIN MANAGEMENT OFFICE

As Chief of the newly created Levee Repairs and Floodplain Management Office, **Mike Inamine** brings a strong background in the planning, design, and construction of water resources projects.

Inamine, a graduate of Santa Clara University with a Bachelor of Science degree in Engineering, has over 25 years of engineering experience. In 1984, Inamine's State career began at the Department of Transportation designing and constructing highway structures. His DWR career began with the Division of Safety of Dams in 1985 where he reviewed design and inspected dams throughout California. In 1991, Inamine joined the Division of Design and Construction (now the Division of Engineering), where he worked on numerous projects, including Tehachapi East Afterbay, East Branch Extension and investigations of Oroville and San Luis dams. He left the Division as Construction Office Chief in September 2006, moving to his new position in the Division of Flood Management.

For Inamine, flood management has been an important part of his career. He fought floods in 1997, 1998 and 2006 throughout the Central Valley. As a member of the National Science Foundation team that investigated New Orleans levees immediately following the Gulf Coast disaster, Inamine saw first hand the damages due to this flood.

"New Orleans' damage was devastating – like visiting a bomb site," said Inamine. "The inundation levels and population density could be roughly equated to a Sacramento levee break; and New Orleans had over twice the statistical flood protection of Sacramento prior to Katrina. For a variety of reasons, flood disasters are followed by political amnesia when it comes to funding and priority. The Gulf Coast disaster was different. We have to ride this current momentum to make tangible improvements in the level of protection for the people and resources of California." ■





FEATHER RIVER

Fish Program

By Annie Parker

Originating in the northern Sierra Nevadas, the Feather River runs down the western slope of the mountains and through the rolling foothills, merging with the Sacramento River and flowing toward the ultimate destination of the Pacific Ocean. Upstream of the city of Oroville, these waters travel through the Feather River Canyon and are captured temporarily in Lake Oroville, the keystone of the State Water Project. The Lake Oroville complex, built by DWR, provides water storage, flood control, recreation, improved water quality, hydroelectric power, and wildlife habitat.

With the creation of the Oroville complex, and as part of the original National Oceanic and Atmospheric Administration Fisheries Biological Opinion, local involvement, and the original FERC license, the State was tasked with the need to mitigate the loss of habitat for steelhead and Chinook salmon that return to the Feather River to complete their life cycle and spawn.

One solution was the construction of the Feather River Fish Hatchery, built in 1967, which was designed to artificially spawn the returning adult salmon, and rear the juvenile salmon until they are released in the river or trucked and released in the Bay – Delta. The hatchery is operated by the Department of Fish and Game with funding by DWR and the State Water Contractors.

In conjunction with the Fish Hatchery, the Feather River Program, run by DWR's Division of Environmental Services (DES), and in coordination with other State, federal and local interests, was established to conduct fishery studies and monitoring on the Feather River.



Top Photo: Feather River Fish Program staff met with Mike Rowe of "Dirty Jobs." (Left to Right) Ryon Kurth, Jason Kindopp, Alicia Seesholtz, Mike Rowe, Katie Lentz, Colin Purdy, Tim Vieira, Phil Huckobey, and Brad Cavallo

Small Photo: Katie Lentz loads a salmon into the boat for processing.

Background

There are two Chinook salmon runs, or races, on the Feather River, the Spring and the Fall. The program was originally designed to estimate salmon production in the river by using rotary screw traps to estimate the number of juvenile salmonid emigrants. The program has expanded to include other fishery studies, and to support the relicensing process with critical information about the health of salmon and steelhead fisheries.

"We want to insure that we maintain a healthy population of salmon and steelhead in the Feather River said **Heidi Rooks**, Chief of the Ecological Studies Branch.

The California Department of Water Resources coordinates operation of the Oroville Dam and facilities with the Bureau of Reclamation's Central Valley Project (CVP) facilities under the CVP Operations Criteria and Plan (CVP-OCAP) and in compliance with the NOAA fisheries Biological Opinion to reduce the impact of the Oroville Dam on Feather River fisheries.

Furthermore, due to the fact that the Oroville complex generates hydroelectricity, the Feather River operations are also regulated by the Federal Energy Regulatory Commission (FERC) license. It is expected that FERC will provide DWR with a list of conditions to improve the habitat for Feather River salmonids. Some of the mitigation expected in the new license includes augmenting the gravel in the river for spawning, providing structural habitat such as tree roots to provide shelter for juvenile fish, and providing side-channel habitat for young salmon and steelhead.

Program Operation

Running the Feather River Program requires different duties at different times of the year. Most data collected for the program are used to determine the population and health of the Feather River fisheries, and there are several techniques used to evaluate the populations.

According to **Alicia Seesholtz**, an Environmental Scientist with DES, to determine the in-river population of juvenile salmon, rotary screw traps, operated from December to June in two separate locations on the Lower Feather, are used to catch the young salmon, and can also be used to catch steelhead for population estimates.

"Although we usually get only about two to five percent of the juveniles that come our way, it helps us determine the in-river population of the salmon and how many are likely leaving the river," said Seesholtz.



Top Photo: Amber Ratcliff chops a "non-fresh" carcass.

Bottom Photo (Left to Right): Heidi Rooks, Alicia Seesholtz and Brad Cavallo discuss the enormous task of counting all these salmon.

> > > continued on next page



Jason Kindopp holds up a recently processed female. The colored tag in the nose allows the crew to identify the week this fish was tagged.

Some of the salmon from the Feather River Fish Hatchery are trucked downstream and released into the Delta, while others are released into the river. Most juveniles that were spawned in the river only stay about a month before they too begin to head for the sea. A salmon typically spends about two to four years at sea before returning to the river to spawn and die.

Another method to help determine the rate of return and harvest of the steelhead and salmon populations is by doing a creel survey. The term creel census comes from the basket historically carried by anglers to hold the fish they caught. DES staff will talk to a sample of fishermen along the river and ask how many salmon or steelhead they have caught (other species as well). The crew will also perform a survey of all the anglers on the river to estimate the amount of effort anglers are expending. This helps provide DES staff with the information to help answer two important questions, 1) how many salmon and steelhead are being harvested and 2) how many are making the successful journey back up the river.

Once a salmon successfully navigates its way back up river past the waiting predators and fishermen, they have two choices once they reach the Fish Barrier Dam. They either choose to climb the fish ladder into the hatchery, where they are artificially spawned by hatchery staff, or they turn around and spawn downstream of the dam.

Due to the lack of ideal spawning habitat such as gravelly deposits, the salmon that forgo the hatchery and choose to spawn downstream are often faced with a lack of ideal spawning places, and salmon may choose a site that already holds a nest, and literally spawn on top of it, destroying the nest below.

Furthermore, the hatchery facilities, too, can become overwhelmed with the returning runs, placing great demands on hatchery facilities that were designed to process fewer returning adults.

The Escapement Survey

Around September, DES staff at Oroville gears up to begin the Chinook Salmon Escapement Survey. The survey is conducted through the fall to December to evaluate the abundance, distribution, and timing of the spawning Chinook salmon. The survey area extends from the Fish Barrier dam at the Hatchery down to the Gridley Bridge. An estimate of the spawning population is calculated from the results of the weekly count of carcasses.

The purpose of this survey is two-fold: to estimate the population and to get an idea of the total salmon population make-up (hatchery vs. in-river production). Additionally, DES staff tries to determine whether or not the salmon are spawning successfully.

"We do the escapement survey to try to determine how many salmon are spawning," said Seesholtz. Besides conducting the analysis for the spawning survey, Seesholtz heads up the radio telemetry program. This program involves tagging Spring-run salmon with radio tags to track their movement from Spring until Fall. This allows Seesholtz to better understand exactly where these fish hold during the summer and spawn in the fall.

DES staff surveys the river on boats, usually with four people onboard, and by foot, counting any dead salmon they encounter. For every salmon encountered, various biological information must be collected. First, if possible, they determine if the salmon is Spring or Fall run (some Spring run salmon are tagged with a highly visible numbered tag, Fall are not). Next it must be determined if the fish is "freshly" dead. "Fresh" salmon are processed for biological information while "non-fresh" salmon are not. If "fresh" it must be determined if it is a hatchery salmon or not. If the adipose fin, located on the back of a salmon, is missing, that particular fish was hatchery raised, and has a tiny coded wire tag embedded in its nose. This tag contains the data about the hatchery of origin, the year they were raised, and what run they are. DES staff will then process the salmon and collect biological data (sex, spawning status, length, scale samples), remove the head, and give it to the Department of Fish and Game for tag retrieval. DFG uses the data to generate population data and to help determine how many salmon are straying between different hatcheries. If the salmon was "fresh" but not of hatchery origin, it would be tagged in the nose with colored flagging and released back to the river for inclusion in the mark-recapture survey to be recaptured in the following weeks. This will allow Seesholtz to produce an estimate

of the number of salmon spawned since the crew cannot individually count them all. If the salmon is “non-fresh”, it is simply chopped in half with a machete to ensure that it is not counted again in the next weekly count. A final count is tallied in December.

The final count usually ends up being a mix of Spring and Fall run salmon. According to Seesholtz, returning salmon numbers can range anywhere from 40,000 to over 180,000. She said that this year large numbers of salmon returned early and then quickly tapered off earlier than usual. She said it was also an odd year because there was a much stronger Spring run than we are used to seeing.

“It’s a dirty job, and the smell can be fairly overwhelming out there,” said Seesholtz.

“It’s a dirty job, and the smell can be fairly overwhelming out there.”

— ALICIA SEESHOLTZ

During the peak of the run, up to 12 DES employees are out on the water, chopping fish and making counts. **Tim Vieira**, a Fish and Wildlife Technician, has been working on the escapement survey since 2000, and he said he can remember years when there were tremendous numbers of salmon everywhere.

“I remember one year when I chopped almost 60 salmon without even taking a step. They were everywhere,” said Vieira.

“It’s a hard job, but it’s kind of neat. You really bond with your co-workers because you are spending a lot of time together doing these surveys,” said Seesholtz.

Since trolling the river looking for the dead salmon can be time consuming and not as accurate as DES staff would like, there has been talk of improvements that will help make the count easier and more accurate. One such improvement

is a counting weir on the Feather River through which the salmon will have to pass to get upstream to the main spawning grounds. Each returning salmon will be recorded on video to determine the exact number. There is also a proposal to construct a separation weir in the future to help separate the Spring and Fall runs when they return.

The Spring Salmon Runs and New Challenges

Currently, the Spring Chinook salmon run on the Feather River is listed as threatened under the State and Federal Endangered Species Acts. Hatchery staff are careful to try to spawn the Spring salmon with each other to ensure the genetic purity.

According to Rooks, part of the program to accurately determine the counts of returning salmon has necessitated separating the Fall run from the Spring run as much as possible. In the past, the hatchery fish ladders would be opened in the fall for the salmon to enter, and an arbitrary cut-off date was created to distinguish between the Spring and Fall runs.

Before the new program (which tags the Spring run coming into the hatchery during the spring), it was almost impossible to tell the salmon runs apart because their spawn times overlap.

Now, when the Spring run arrive at the Feather River Hatchery in the spring, they are tagged and then released back into the river, where they wait through the summer, and prepare to spawn at about the same time as the Fall run. The Spring run salmon are tagged with two tags, one on each side of the dorsal fin, so the tags can easily be spotted by hatchery staff, fishermen, and the escapement survey crew.

Some of these fish are tagged with radio tags. These tags, as well as the ones used on the steelhead population, and possibly sturgeon in the future, are used to track the movement of the fish to locate the spawning habitats utilized. For steelhead and sturgeon, the tag will also be used to determine how long they stay in the river before heading back out to the Bay – Delta and ocean. ■

"DIRTY JOBS" VISITS OROVILLE

The annual Feather River Chinook salmon spawning survey, conducted by DWR staff got a little extra attention this year with a visit from Discovery Channel's show *Dirty Jobs* and host Mike Rowe. The episode aired in January of 2007.

"It was my idea to submit an audition video to *Dirty Jobs*," said **Jason Kindopp**, an Environmental Scientist with DES. "I had friends that kept telling me that the carcass survey was perfect for the show, so I finally broke down and decided to do it."

The audition video was about two minutes long, with shots of the DES crews slashing open salmon and voice-overs of the crew explaining what the survey was about. According to **Brad Cavallo**, a former DES biologist, now with Cramer Fish Sciences,

from adults which contained microscopic coded wire tags which were implanted in juvenile salmon at the hatchery years earlier. He also assisted in collecting various biological information, including slicing the head open to collect otoliths (ear stones) from within the ear canal.

The filming took place in downtown Oroville in areas known as the Auditorium Riffle and the Hatchery Ditch. These sites were selected by DES staff due to the large concentration of dead salmon.

"He tried a little of everything," said Cavallo. "He was particularly interested in chopping in half the females that didn't spawn and watching the eggs pour out."



DES staff chopped fish as high up in the air as possible to get the maximum splatter effect.

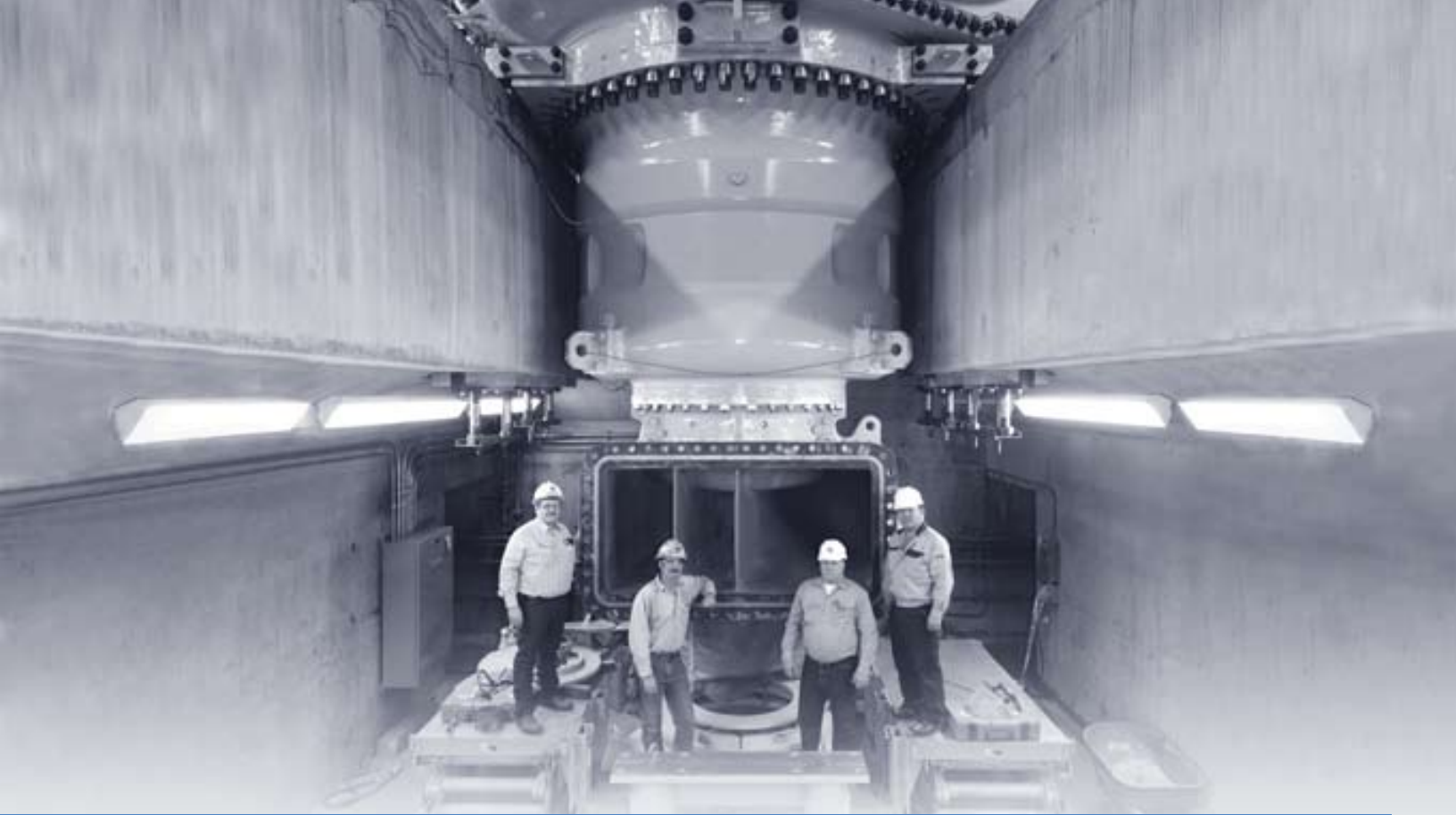
"The quality of the video was poor, but we certainly got our content across," said Kindopp.

On the 15 minute *Dirty Jobs* segment, Jason and DES scientist **Ryon Kurth** showed Rowe the proper method for doing the "air chop". The "air chop" consists of lifting a dead salmon into the air and then chopping it in half with a quick and well placed machete swing. A chopped salmon indicates that the fish has already been counted and can therefore be ignored in subsequent weekly surveys. Rowe also helped recover heads

Other DWR employees who helped with the survey that day were **Alicia Seesholtz**, **Phil Huckobey**, **Tim Viera**, **Katie Lentz**, and **George Purdy**.

"I would say that I am pleased with the outcome of the show, although it would have been nice if they included the entire crew since this is really a team effort," said Kindopp. "But I do think they did a good job of explaining the purpose of the survey without overly emphasizing the dirty aspects." ■

Above, Left to Right: Mike Rowe chops a salmon the hard way while Ryon Kurth records data. Mike Rowe shows off a recent chop.



EDMONSTON PUMPING PLANT

Pumps Being Replaced

By Soheil Loghmanpour and Don Strickland

Four of the 14 huge pumps that accomplish the State Water Project's "big lift" at A.D. Edmonston Pumping Plant, southeast of Bakersfield, are being replaced with a \$30-million contract awarded to the Hitachi Corporation.

Installation of the first prototype pump got underway late last year and is scheduled for completion May 2007. If testing proves the new pump to be a successful upgrade, the other three replacement pumps will be installed. The fourth and last unit is scheduled to be completed by January 7, 2011.

Edmonston has 14 pumping units, each 57 feet tall and weighing 420 tons. They elevate California Aqueduct water nearly 2,000 feet over the Tehachapi Mountains into Southern California. They were supplied by three manufacturers: four

pumps by Allis-Chalmers (AC) (commissioned in 1971), seven by Baldwin-Lima-Hamilton (commissioned in 1973), and three by Voith (commissioned in 1982).

The Reasons for Replacing the Pumps

The plant was designed with the capacity to convey 2.5 million acre-feet of annual entitlement water to Southern California. In recent years, Edmonston has been pumping near its maximum capacity-making pump reliability and availability critical to SWP objectives.

Units W2, W4, W6, and W8 (the four AC pumps) have required more maintenance than the other units because of major design flaws in the pump suction and first stage.

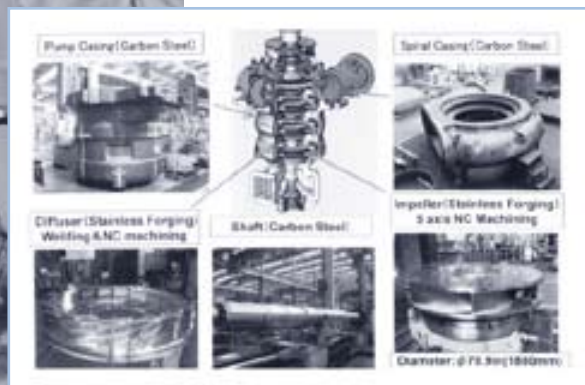
"Efficiency and reliability of the four Allis Chalmers pumps have been declining rapidly in recent years," says Mechanical and Electrical Engineering Branch Chief **Farshid Falaki**. "It's imperative that the Department has efficient and

Above, Left to Right: During the installation of the new pump at Edmonston Pumping Plant, the team included Vince Brown of DWR's Engineering's Electrical and Mechanical Section, Jack Hendricks of the Industrial Company, Dale Padgett of DWR's San Joaquin Field Division, and Itsumi Norimine of Hitachi.

> > > continued on next page



Left: Division of Engineering Lonnie Essig and Farshid Falaki (at right) verify dimensions of model pumps during an inspection at Hitachi Factory in Japan. At right, a prototype pump during manufacturing at Hitachi.



reliable units if it is to meet its water delivery commitments in the most effective manner. The new pumps will not only raise the bar on quality, performance, and reliability for all our future units, they will also contribute greatly in meeting our water delivery commitments for years to come while using less energy.”

Over the years, the AC pumps have suffered not only from normal wear and tear, but also from extensive first stage impeller cavitation and erosion, as well as extensive corrosion because of coating failures. Original manufacturer attempted to fix the problems by field grinding the first stage impeller vanes to reshape them and by modifying the suction inlet configuration after units were installed in 1971.

Grinding somewhat reduced the damage rate, and later suction inlet air injection reduced noise and cavitation. Nonetheless, the pump operation remained unsatisfactory and these four units continued to be the most troublesome in the plant and along with having lower efficiency than the other 10 pumps.

Between 1985 and 2001, DWR performed various studies on unit refurbishment versus replacement and brought in Lewis & Zimmerman Associates, Inc. in 1998 to perform a Value Engineering Study.

In 2000, a technical advisory team was formed from staff of the Divisions of Engineering (DOE) and Operations and Maintenance along with the Metropolitan Water District of Southern California. Working with a DWR Management Steering Committee, the team concluded that economic considerations favored replacing the pumps. In August 2001, then Deputy Director **Stephen Kashiwada** approved the pump replacement and DOE began the process.

The Replacement Process

Hitachi was awarded a contract in May, 2003, that carried four main objectives: increasing pump reliability; availability and efficiency, while reducing maintenance needs.

The company was tasked with:

- Designing, fabricating, and testing a four-stage pump model and a single-stage pump model, then furnishing a pump model test program report.
- Designing, manufacturing, installing, and testing four four-stage pumps to replace the Allis-Chalmers pumps.

In October and November 2004, Hitachi performed two sets of model tests as required by the contract specifications. The first set of tests using a model consisting of the pump

inlet, pump discharge, and the four-stage pump was conducted at Hitachi City in Japan. The second set of tests using a model consisting of the same pump inlet and pump discharge, but with only the first stage of the pump was conducted at Tsuchiura, Japan.

The four-stage model tests were conducted to confirm that the new design meets the specified performance. The single-stage model tests were conducted to confirm that the first stage meets the specifications' cavitation-free operation under the full first-stage pressure.

Two teams witnessed the model tests on separate occasions. Members included **Farshid Falaki, Soheil Loghmanpour, Peter Wade, Lonnie Essig** and **Masood Mesbah** from DOE and **Sam Kuah, William Watson, and David Gledhill** from the Metropolitan Water District of Southern California. Both tests showed that the pump will operate cavitation free over its operating range.

After successful completion of the model test and acceptance of the report, the contractor was directed to proceed with designing, manufacturing, installing, and testing the first prototype pump. Following a positive test result, the contractor will proceed with manufacturing the remaining three pumps.

Lonnie Essig is Chief of DOE's Equipment and Materials Section and the assigned Field Engineer for installation of the Edmonston Replacement Pumps.

"I would like to thank all the DOE and O&M staff that participated in the engineering, manufacturing, inspection, and installation of the first replacement pump for our success to date," says Essig. "The installation is moving forward on schedule and on budget. We anticipate a successful test of the first unit before the end of April."

The guaranteed prototype efficiency is 92 percent. The maximum prototype efficiency predicted by the model is

92.6 percent. This was achieved by using state-of-the-art computational fluid dynamics to optimize the flow at the inlet and to optimize the shape of the impeller blades. The increase in pump efficiency from 89.5 to 92.6 percent is equal to a reduction in operating costs totaling \$21,850,000 for all four units over the next 30 years.

Typically, all pumps in the State Water Project are operated at night to take advantage of lower cost off-peak power. At Edmonston, for each unit out of service the average cost to make-up pump schedule during on-peak hours is \$650,000 per month. Therefore, the four unreliable Allis-Chalmers pumps have a potential of costing the Department millions of dollars in a very short time period.

The new pumps are being manufactured using state-of-the-art materials and to the highest industry standards, which will reduce the maintenance cost for years to come. Manufacturing of the pump components is taking place at Hitachi's factory in Tsuchiura. Casting of the components for the first pump was done at various Japanese foundries in Daido, Nidak, and Ube.

"I am very pleased with the progress of the new pump installation at Edmonston and also that all the different entities, required on a project of this magnitude, are working safely and efficiently together," said Chief of San Joaquin Field Division Jeff Said. "I was an apprentice at Edmonston back when the Voith units 10, 12 and 14 were installed and started up and that was a great experience for my career. I am excited for my staff as they gain the knowledge and hands on information as a result of being part of this installation. Increasing the reliability of our units pays benefits on multiple levels and enables us to better maintain, operate, and protect all the equipment in our Field Division safely and on schedule." ■

For all of their work on the Edmonston Pumping Plant Pump replacement project, special thanks to:

FROM SAN JOAQUIN FIELD DIVISION:

Jeff Said, Chief
Curtis Johnston, Hydroelectric Plant Operation Superintendent
Gary Chee, Senior Hydroelectric Power Utility Engineer
Elmer Gray, Hydroelectric Plant Maintenance Superintendent
Mike Brummer, Hydroelectric Plant Mechanic II
Dale Padgett, Hydroelectric Plant Mechanic I

FROM THE DIVISION OF ENGINEERING:

Farshid Falaki, Principal Mechanical and Electrical Engineer
Soheil Loghmanpour, Supervising Mechanical Engineer
Wayne Cedidla, Senior Mechanical Engineer
Peter Wade, Mechanical Engineer
Lonnie Essig, Supervising Engineer
Terry Douke, Construction Management Supervisor
Daniel Monterrubio, Mechanical Engineer
Vince Brown, Electrical Construction Supervisor I
Bob Kaper, Supervising E&M Inspection
Jerry Leslie, Mechanical Construction Supervisor I
Ed Ryan, Mechanical Construction Supervisor I

San Gorgonio Pass Water Agency

By Annie Parker

Located 75 miles east of Los Angeles and 35 miles west of Palm Springs, the area of service covered by the San Gorgonio Pass Water Agency (SGPWA) has seen a tremendous explosion of urban growth within its boundaries. With these new communities comes the challenge of ensuring continuing water supplies for future generations.

According to **Jeff Davis**, General Manager, the top priority of the SGPWA is to purchase State Water Project (SWP) water to replenish the severely over tapped groundwater reservoirs in the area. For example, said Davis, the Beaumont Basin, one of the groundwater basins located within the service area of the SGPWA, has been in overdraft for over 80 years.

SGPWA's General Manager

Davis was appointed General Manager in July of 2005, and he has an extensive background within the field of water issues in the West. He has a Bachelor of Science degree in Environmental Engineering from Vanderbilt, and a Master of Science degree in Water Resources Engineering from Stanford. Prior to his work at SGPWA, he spent five years at California State University, San Bernardino, where he was the Founding Director of the Water Resources Institute. Prior to that, he was with the Metropolitan Water District of Southern California for 13 years.

"This has been a good job, and I like it here. I have wanted to work in the water field since I was young," said Davis.

As General Manager, one of Davis' first projects was the creation and implementation of a strategic plan for the agency. This was accomplished with input from the elected



Board of Directors and independent consultants. This plan is now available online.

"I'm a strategic thinker," said Davis. "I think our agency should be more proactive than reactive, and this plan sets a roadmap for what kind of work we need to do, and what goals we will achieve."



Above: Jeff Davis stands next to one of the eight cfs pumps that pump State Project Water to the Agency's Little San Gorgonio Creek Recharge Facility.

Left: Cherry Valley Pump Station, the last pump station on the East Branch Extension, located in Cherry Valley.

History and Projects of SGPWA

According to the SGPWA's Web site, its mission is to import supplemental water from the SWP, and protect and enhance current and future water supplies to the local water districts within the Agency's service area. The agency boundaries include the cities of Calimesa, Beaumont and Banning, and the Riverside County communities of Cherry Valley and Cabazon.

The SGPWA was established in 1961 via legislation known as the San Gorgonio Pass Water Agency Act. It responded to the massive overdraft of the groundwater resources in the area by agricultural use. The Act lays out the operations of the SGPWA, with the most important being the use of SWP water to recharge the local groundwater aquifers.

According to Davis, the more the local aquifers are overdrafted, the more expensive it becomes for the water to be extracted.

"Everyone that uses a well has to run their pump for longer periods of time to pump the water out, and that ends up costing them a great deal in electrical costs," said Davis.

Along with replenishing the aquifers with SWP water, the SGPWA is hoping to reduce overdraft by creating a water conservation outreach program, which is currently in the planning stages.

"We operate in an extremely rapid-growth area, and we are looking at the best ways we can encourage a per-dwelling unit water use reduction, among other conservation messages" said Davis.

The SGPWA is a water wholesaler with four major customers. Although the SGPWA has been a State Water Contractor since its inception in 1961, it received no SWP water until the completion of Phase I of the East Branch Extension in 2003 by DWR.

Water from the SWP travels east through the East Branch of the California Aqueduct to the Devil Canyon Powerplant Afterbay, where the East Branch Extension, completed in 2003, extends east into Riverside County via the East Branch Extension's Foothill Pipeline, Greenspot Pipeline, Bryant Pipeline, and Singleton Pipeline. Water is pumped at Greenspot Pump Station, then into Crafton Hills Pump Station and into Crafton Hills Reservoir. From Crafton Hills the water flows to Cherry Valley Pump Station, where water can be delivered to customers or into spreading basins for groundwater recharge.

According to Davis, the East Branch Extension which was a joint project with SGPWA, DWR, and San Bernardino Valley MWD (another state water contractor), currently covers only the western half of the SGPWA service area. The other half of the customers are still reliant on the declining groundwater supplies. Davis and the SGPWA are looking into ways to raise funds either to extend the East Branch Extension, or to help their customers build infrastructure that will allow them to extend their facilities the extra distance to the pipeline.

Another challenge faced by the SGPWA is that of funding. According to Davis, there is not a large tax base within the service area, and collecting funds for creating new infrastructure can be difficult.

"The San Gorgonio Pass Water Agency Act spells out how we can and cannot collect revenue, so it is up to us to try and figure out new ways to raise funds for improvements," said Davis. ■

State Water Project water flows into the Little San Gorgonio Creek Recharge Facility. The facility has been operating since 2003 and so far has recharged the Beaumont Basin with over 2,600 acre-feet of imported water.

Stocking of Steelhead trout in Oroville

There's something new for anglers to be excited about at the Oroville facilities. For the first time in 20 years, the Department of Fish and Game (DFG) and Department of Water Resources (DWR) are stocking coldwater fish in the Afterbay.

DFG chose steelhead trout for the Afterbay because they are native to the Feather River. If they make their way into the river through releases, their presence will not upset the ecosystem.

To ensure the best outcome, DFG sets health standards to prevent the spread of disease. Every step of the process is tested, from the source of the eggs to the fish that result. Stocking may be halted at any point if problems arise.

Once fish have grown to about 10 inches and eight ounces apiece, they are ready to be transferred from the Oroville hatchery to the Afterbay. Using nets, fish are scooped into tanks and

driven to their new habitat. After the truck is backed down the boat ramp, hatchery staff open a valve, and the fish wash into the Afterbay. The trout linger briefly after they're released, then zip off to explore the open water.

According to **Eric See**, Environmental Scientist at Oroville, some of these steelhead are likely to migrate into the Feather River, but many may also stay in the cold water of the Afterbay to feed on invertebrates and wakasagi smelt. See will be monitoring the success of this experimental fish stocking effort over the next several years.

"Hopefully enough fish will remain and grow to a trophy size to provide for a viable, cost effective recreational fishery," said See. ■

Angeles Tunnel Ten-Year Inspection Project Completed at Castaic Lake

DWR crews have completed an inspection and maintenance project they perform about every 10 years on the seven-mile long, 30-foot diameter aqueduct tunnel that carries water from Lake Pyramid to Castaic Lake.

The "Angeles Tunnel" normally holds 700 acre feet of water but was drained to allow access to the inspection and repair teams.

"Everything went just like clockwork," said **Geno Young** of DWR's Water Operations Section. "Southern Field Division work was completed ahead of our schedule, the tunnel refilled and placed in service. It should be available for water transfers for the next 10 years."

DWR's aqueduct tunnel work was coordinated with a separate maintenance project at the Los Angeles Department of Water and Power's hydroelectric plant just upstream of the lake. That necessitated drawing down Castaic Lake last November by about half its normal 300,000 acre foot volume (see photos). LADWP's work has also been completed and a four-month process to refill the lake began early in January.

LADWP crews also did some debris cleanup and erosion repair at the Elderberry Forebay Dam, at the upper end of Castaic Lake.

A popular boating and fishing site, Castaic Lake's recreational opportunities are managed by the Los Angeles County Parks and Recreation Department. Buoys were placed to alert



Castaic Lake's Intake Tower after the drawdown. The water level is usually high enough to cover the ports of the tower.



Left: Fish and Wildlife Technician Paco Cabral of the Department of Fish and Game loads Feather River Hatchery steelhead into a tanker truck destined for the Thermalito Afterbay. This is the first time the Afterbay has been stocked with coldwater fish in over two decades.

boaters to new islands that appeared with the lower water level, but the lake stayed open with limited impact on recreation.

Located seven miles north of Magic Mountain just off Interstate Highway 5, Castaic Lake was opened in 1972 after a five year construction project. It was built to provide emergency storage during a shutdown of the State Water Project Aqueduct to the north. Water from the lake routinely goes to the Castaic Lake Water Agency and the Metropolitan Water District of Southern California.

Castaic Lake is the terminal reservoir on the West Branch of the State Water Project. ■

Future Years Look Busy for State Water Programs, Top DWR Officials Tell All Divisions Meeting

California water programs, including flood safety and the State Water Project, will be busy during the next decade, top DWR officials informed an all divisions meeting of Department staff on November 27.

Director Lester Snow reported that DWR's flood experts will be busy implementing almost \$5 billion in levee improvement bonds approved by voters at the November election. But the SWP, too, will be active, he said, adjusting to climate change impacts affecting how reservoirs are operated in an era of shrinking snowpack and changing runoff patterns.

As climate change increases the percentage of water supply provided by rain, Snow indicated that could fuel a drive for more surface storage reservoirs and require adjusting the way existing reservoirs do business.

The SWP will remain a cornerstone for California's economy, Snow assured a standing room gathering of DWR staff in the Secretary of State's building auditorium in Sacramento. "As the SWP goes," said Snow, "so goes the economy of the State of California." Snow praised the quality of SWP workers, adding: "I'm proud to work with the people in this room."

Ralph Torres, Deputy Director for the SWP, welcomed several hundred DWR staffers to the first all divisions meeting in his memory. They heard an update on DWR planning and expectations from Torres and key managers, including **Carl Torgersen**, Chief, O&M Division, and **Rich Sanchez**, Division of Engineering.

Sanchez reported on a hefty list of modernizing projects underway along the SWP. Torgersen noted that 2006 was an excellent year for SWP water supply delivery, with contractors receiving full Table A requests.

Torres and Torgersen assured staffers that while DWR will change and adapt to meet evolving SWP needs and such challenges as equipment modernization, energy costs and water supply demands, they need not fear reorganization.

"Existing divisions will be strengthened and some staff recruitment may take place," said Torres. "There's nothing to be nervous or concerned about in terms of reorganization."

An overview of SWP challenges and prospects, entitled a "State of the State Water Project" report, was given to SWP Contractors at a meeting on December 5. ■

New Law Protects SWP Right of Way

Through the efforts of DWR employees from the Office of Chief Counsel, Legislative Affairs Office and the Divisions of Operations and Maintenance (O&M) and Engineering (DOE), new legislation has been enacted to protect the right of way against encroachments. Senate Bill 543 was authored by Senator **Bob Margett** (District 29) and became effective on January 1, 2006. This bill amends the California Water Code and provides the DWR with legal authority to prosecute illegal encroachments on State Water Project (SWP) rights-of-way. As a result of this bill, any person who makes an alteration, improvement, encroachment, or excavation within the SWP right-of-way without first obtaining a proper encroachment permit is guilty of a misdemeanor.

"The passing of this legislation provides essential statutory authority to DWR for controlling illegal encroachments on the State Water Project's right-of-way and helps ensure its protection and reliability," said **Carl Torgersen**, O&M's Division Chief.

In 2000, DWR staff from O&M, DOE, and the Office of the Chief Counsel prepared Legislative Concepts requesting revisions to the California Water Code which would provide DWR the authority to control and enforce the removal of unauthorized encroachments thus protecting the security, safety, and reliability of the SWP.

In 2004, O&M performed inspections of unauthorized encroachments to provide supporting documentation for a revised Legislative concept. The concept was supported by Director **Lester Snow**, approved by the Governor's office, and introduced in the 2004–2005 Legislative Session. After Governor Schwarzenegger signed the bill in September 2005, DWR staff began working on developing regulations for the implementation of the statute. It is anticipated the regulations will become effective in 2009. The regulations will define and make enforceable DWR's process for encroachments on SWP rights-of-way. O&M is leading the task of regulation development.

Prior to the statute, DWR had little legal authority to take action against unauthorized encroachments. The bill makes it unlawful for anyone to construct an encroachment within the State Water Project right of way without first obtaining prior written permission from

DWR. If an owner fails to obtain an encroachment permit from DWR, DWR may take action for the cost of removal of an unauthorized encroachment, legal fees, and fines of \$1,000 a day.

Throughout 2005, O&M staff was involved with writing memoranda, letters, and issue papers; creating inventories with more than 100 photographs of unauthorized encroachments within Delta and Southern Field divisions; and compiling several informational binders in response to requests from the Director's Office, the Resources Agency, the Governor's Office, and Legislative staff. Getting the bill passed was a joint effort among O&M, DOE, Office of Chief Counsel, and Office of Legislative Affairs.

Special thanks to O&M's **Teresa Sutliff, Elena Behnam, Mark Herold, Leroy Ellinghouse, Maria Chin, Bonnie Duecker, and Chuck Morones** (retired); DOE's **Richard Sanchez** and **Clifford Winston**; Office of Chief Counsel's **Ward Tabor**; and former Assistant Director for Legislative Affairs **Brian White**. ■



Top Photo: Bonnie Duecker, Water Resources Engineering Associate Supervisor from DWR's Southern Field Division.

Above, Left to Right: (Front Row) DWR staff involved with Senate Bill 543 included Ward Tabor, Cliff Winston, Mark Herold. **(Back Row)** Leroy Ellinghouse, Elena Behnam, Division of Engineering Chief Rich Sanchez, Maria Chin, Teresa Sutliff. (Not in photo: Brian White and Chuck Morones.)

Reuben Jimenez Appointed Deputy Director of Business Operations

Reuben Jimenez was appointed Deputy Director for the Department of Water Resources in February of 2007. As Deputy Director for Business Operations, Jimenez will oversee the Divisions of Fiscal Services, Management Services, Technology Services, and Internal Audits, and the Offices of Information Security and Workforce Equality.



Prior to joining DWR, Jimenez served as the Deputy Director of Administration for the Office of Statewide Health Planning and Development (OSHPD) for nearly four years.

"Through many employee efforts and a lot of hard work during my time with OSHPD, the organization became a Sacramento Workplace Excellence Leader (SWEL) award winner," said Jimenez. The award was given due to operational efficiencies and promoting a positive workplace environment. This prestigious award has over 100 private and public competitors.

Jimenez was raised in Mexicali, Imperial Valley, and San Diego. He earned his Bachelor of Arts and Bachelor of Science degrees in Neuro-Psychology and Sociology at the University of California, Santa Barbara. He also has a Master of Science degree in Public Administration from Notre Dame.

During his 18 years of State service, Jimenez, who has worked in many aspects of administration, has worked for small, medium, and large State agencies. He began his State career as a Budget Analyst for the Department of Social Services in Sacramento. Jimenez was later hired in Eureka as Contract Analyst for the Department of Transportation. Thereafter, the Department of Transportation promoted Jimenez to an Equal Employment Opportunity (EEO) Officer at District 10 office in Stockton.

"As an EEO Officer, I implemented the reuniting of various advisory boards to form one board," said Jimenez. "I feel

"I feel strongly if you have everyone working together at a table, then you get a more quality product."

— REUBEN JIMENEZ

strongly if you have everyone working together at a table, then you get a more quality product."

Jimenez then returned to Sacramento as an Associate Personnel Analyst for the Department of Food and Agriculture, where his assignments covered human resources. In the 1990s, he joined the Secretary of State's office as a Human Resources Analyst. He later worked for the Department of General Services as an Assistant Personnel Officer and for the California Environmental Protection Agency's Department of Pesticide Regulation as Chief of Human Resources.

Before joining the State, Jimenez worked in San Diego for Tissue Banks International promoting tissue donations and in San Mateo County as a Social Worker.

Jimenez, who was chair of the State Personnel Information Network, trained in many areas of Administration and is a member of the American Society for Public Administrators.

Jimenez is excited about joining of DWR. In his many years of State service, he has heard of the talent and stellar reputation of DWR. He hopes to contribute to DWR's success in the future.

In addition to working at several locations throughout California, Jimenez has enjoyed bicycling from Oregon to San Diego in several trips. He has also climbed several Mountains, including Whitney, Shasta, and Lassen. ■

Tim Garza Appointed Technology Services Chief

Tim Garza was appointed Chief of DWR's Division of Technology Services in March.

Garza's 27 years of Information Technology (IT) experience includes providing a full range of technology and business engineering services to both the public and private sectors.

Before joining DWR, Garza spent 15 years at CalPERS, where he was responsible for providing business solutions utilizing new technologies, implementing key methodologies and processes, and enabling the business areas to achieve their strategies and objectives through the innovative use of information technology. Some of the major processes and systems that Garza implemented at CalPERS include: Enterprise Document Imaging and Retrieval, PeopleSoft ERP, Business Process Workflow, Customer Relationship Management, Business Performance Intelligent, Decision Support System, Service Request System, and a Case Management System. Garza also introduced key methodologies and practices related to enterprise and service-orientated architecture, IT Governance, rapid application development, project portfolio management, IT planning, and organizational development.

Garza brings a service-oriented perspective to DWR's IT leadership.

"Our goal is simple ...to help you reach yours," Garza said.

Garza feels that he and DWR are a good fit.

"I really admire the professionalism and knowledge of DWR management and staff. The organization has strong business strategies and direction. DWR is a place that is willing to use innovative technologies to improve its business operations and processes," said Garza. "The many achievements I have heard about that have come from DWR so far are truly amazing to me, and I look forward to working with such a knowledgeable group of people."

Garza looks forward to improving the IT/Business Alignment so that DWR can receive the maximum return on its technology investments.



"We need to understand the various business drivers and environmental factors DWR deals with, and then create a technology strategy that will help DWR achieve its goals and objectives," said Garza. "Initially, I want to make sure that DTS understands what the true business needs of DWR are, and that all of our IT decisions, projects, actions, and processes be geared toward providing for those needs."

"I want an IT culture where 'no' is not in our vocabulary, where we always find a way to provide a solution to a problem," Garza said. "Simply put, I want DTS to be known as the place where they get the job done for their clients."

"The many achievements I have heard about that have come from DWR so far are truly amazing to me, and I look forward to working with such a knowledgeable group of people."

— TIM GARZA

"The future of DTS will be as a service-oriented organization. I believe the business units define what needs to be achieved, and IT works with the business to determine how to best technically achieve the desired results," Garza continued.

"I want to create a culture of passion for the work and a fun work place, where staff wants to be," Garza said. "Where DTS staff are not only equipped with the core skill-sets to support the technology, but they have a passionate understanding of what business they are in. We're not in the technology business. We are in the water resources business." ■

Pushing for Health

By Amy Norris

Everybody knows it's not nice to push other people, but **Kell Brigan** traveled all the way to Taiwan in November 2006 for a chance to do just that. Brigan practices Yang style Tai Chi Chuan, the meditative martial art that focuses primarily on slow movements and balance. In "Push-hands," a kind of Tai Chi sparring, opponents face each other touching hand to hand with feet planted. The victor causes her opponent to lose balance and take a step.

Brigan began practicing Tai Chi Chuan in 2003, entered her first competition that year "just for the heck of it," and has been participating in local tournaments ever since. She brings that same commitment and energy to her job as an Assistant Information Systems Analyst in the Web Development Unit, but Brigan definitely likes to leave her work at work.

Before she discovered Tai Chi, Brigan enjoyed long distance bike rides and hikes as a way to get away from the computer. Unfortunately, serious neurological problems left her dizzy and unable to continue her pastime. While researching her illness, Brigan discovered Tai Chi is often promoted as a means to improving balance and health. Once she started, she realized she liked everything about it, and her health improved dramatically.

"I would have good days and bad days when I was recovering," explained Brigan. "With Yang Tai Chi (the slow type), the art will accommodate you... You can make it as challenging as you want." It's similar to yoga in that positions can be modified to accommodate strength or flexibility.

Brigan likes the energy of competition. Obviously not afraid of a challenge, Brigan eagerly signed on for the Taiwan competition. It would be her first time out of the country beyond Canada. Said Brigan, "I learned a lot about traveling. We had some of the most incredible food on the planet. The first night we went to a place called Cozy House. It's a spa up in the hills of Taipei. They have beautiful hills and landscaping and fountains."

Despite the relaxing surroundings, there wasn't much time to get over the 14-hour time change. The team landed at 2 p.m. Taiwan time and was scheduled to compete the next morning. Brigan competed against other students and



Top Photo: Kell Brigan (at left) of DWR's Division of Technology Services competes against Northern Californian Brandi Paape in Tai Chi competition in Taiwan last November. Kell is DWR's Webmaster for 25 sites, including DWR's Home page.

Bottom Photo: Tai Chi demonstration took place before starting two days of international competitions.

ranked 5th out of 13 in the push hands category. The top three competitors were from Taiwan, and the next two were American women.

Truly an international competition, martial artists came from South Africa, Vietnam, mainland China, Norway, Holland, New Zealand, France, Portugal, Brazil and Japan. An observer from the Olympic committee attended so Brigan hopes to see Tai Chi in the 2008 Olympics.

Brigan continues to practice her Tai Chi every day. She takes three classes a week at Eastern Ways Martial Arts in Fair Oaks. Her dedication has helped her progress more quickly than average, but the process is what she enjoys most. "It's a matter of time commitment. You never get to perfect. There's always something to work on!" And now that she's found Tai Chi, Brigan expects to practice the art for many years to come. Said Brigan, "I can't imagine a point in my life not doing it." ■

DWR's Tours Coordinator Michael Miller Hosts Tour Groups from Around the Globe

By Pete Weisser

In the six years **Michael Miller** has coordinated DWR's tours program, he has welcomed and briefed 195 tour groups, totaling nearly 2,000 people, hailing from 49 countries, each thirsting to study California's water issues and especially the State Water Project (SWP).

The outgoing, bearded Miller arranges tours and briefings for this peaceful army of curious tour groups. They are eager to absorb California water facts and especially study the SWP close up, hoping to apply its technology, experiences and example to benefit water programs in their native lands. Miller is proud to facilitate their learning about DWR "its work, its mission and the world class work that we do."

During the peak attendance year of 2002, Miller welcomed 58 tour groups, with 593 individuals, representing 25 countries, from Argentina to Taiwan.

"This is the most rewarding job I've ever had," said Miller, with typical enthusiasm, "And I'm still learning with every tour."

China and Japan are among the leading nations represented on tours, but South Korea, Spain and Australia, are also well-represented.

SWP Is Magnet for Foreign Tours

California's world-renowned SWP ranks as the top tours attraction, for its engineering features, operations and financing. SWP managers provide lectures and briefings. For Miller, each tour group involves preparation, liaison with program experts and briefers, and arranging SWP facility visits, consistent with 9/11-era security.

DWR sites most frequently visited by tour groups are the State-Federal Flood Operations Center, Oroville Dam, key Northern California SWP storage reservoir, and San Luis Reservoir, largest off-stream reservoir in the nation, and a facility jointly used by the CVP and SWP.

"The technical feature that impresses everyone is the big lift at Edmonston," reported Miller. "Once they understand the magnitude of the project, they are very impressed."

Many of the nations sending tours want to emulate the SWP's technical excellence.

"China is in the midst of doing large infrastructure projects-for transporting water as well controlling Yangtze River floods-and they are using the SWP as a model," noted Miller.

"The South Korean government is doing a massive restoration project in central Seoul, trying to 'daylight' a river that is buried in the heart of the city, and creating a flood pathway out of it."

Tour groups are also highly interested in water use efficiency, flood management, water quality and computer modeling for floods and Delta flows.



Learning to Teach About Water

Becoming tours coordinator in 2001 opened Miller's eyes to the many and complex activities DWR performs in managing water resources in California. Before he could teach, Miller had first to learn the complex subject of California water issues, including the mammoth structure and operations of the vast SWP.

"When I took this position in 2001," recalled Miller, whose background was in accounting and training, "I learned how little I actually knew about the Department and all that we did." A tireless student, he "got to know the State Water Project" and other Divisions "in great detail", by tours, seminars, self-study and briefings by experts. As he learned, he was "awed and amazed by the scope and breadth" of DWR activities.

"I have learned about and visited a great deal of the State Water Project," recalled Miller, "But I've also learned about

Above: As part of DWR's tour program, Michael (standing fourth from far right) takes Chinese visitors to Dos Amigos Pumping Plant.

SWP financing, flood management, the electrical energy system and how DWR interacts with the big water resources picture—including the Delta, the Water Use Efficiency program for urban and ag water users, the Urban Streams Program, recycling, desalination and a host of engineering and water statistical information.”

When his predecessor as tours coordinator, **Norma Beck**, made retirement plans, Miller successfully competed against other candidates to fill the tours vacancy. He credits his training and presentation experience as helpful in winning the appointment and doing the day-to-day job. To improve his briefings, he developed DWR and SWP orientations for himself and other presenters.



Created by former DWR Director **David N. Kennedy** and assigned in 1992 to the Office of Water Education (now the Public Affairs Office) the tours program is designed to assure accurate briefing on California and SWP water issues to tour groups from other states and foreign countries.

Independent of the special tours program, DWR routinely welcomes large numbers of the public to its visitor centers and recreational facilities at such venues as Lake Oroville and San Luis Reservoir. The public visitation estimate totaled over 570,000 in 2002.

Conference Exhibits, DWR Tours

In addition to tours for engineers, water program managers, academics and administrators from other states and foreign countries, Miller has revived a tradition of conducting orientation tours of the Delta for DWR employees. These outings give DWR staffers a personal awareness of SWP operations

they might otherwise never gain. In 2003, Miller conducted a dozen DWR employee tours of the Delta.

Miller also represents DWR with exhibits at important conferences, including those of the Association of California Water Agencies (ACWA) and the League of California Cities. “In the conference settings, I get a chance to highlight what’s new at DWR and with the SWP Contractors, who they are, and their relationship to the communities at large,” said Miller.

“During the recent flood events (December 2005–January 2006), I put my knowledge of California hydrology to good use by explaining to the news media different aspects of the Sacramento River flood control system and how the bypass system works to protect larger cities, like Sacramento,”



reported Miller, who worked Flood Center shifts as an emergency public information officer.

Miller entered State service in 1976 at the Franchise Tax Board, moving 10 years later to the Department of Health Services where he worked as an Accounting Technician.

Joining the Department of Forestry and Fire Protection in 1990, Miller worked in payables and fund accounting, and then moved to DWR as a member of the Training Office staff. He credits his public contacts experience with taxpayers at FTB and as a trainer there and with DWR’s Training Office with polishing his presentation skills. Now he uses them as DWR’s tours program coordinator and goodwill ambassador for a globe-trotting clientele. ■

Above Left: Michael makes a presentation about DWR to visitors from Korea.

Above Right: Through DWR’s tours, Michael (center) helps Japanese visitors learn more about the State Water Project.

DWR Engineer is a Part of a Patent that Provides Cost-Effective Water Management Solution

By Margarita Macias

Through the creation of the tool known as "Voyage™," **Zaffar Eusuff** along with other CH2M HILL staff, was awarded a patent for inventing a methodology that can help to plan and operate water supply systems efficiently. Since its invention in 2005, the "Voyage™" technology has been used for several projects including Glen-Colusa Irrigation District's Drainwater Reuse Study, the Oakdale Irrigation District Master Plan in California, and the Jordan River Return Flow Study in Utah. Voyage™ is a water management simulation-optimization tool that can help make operational decisions on complex water systems. Its use can lower operating costs and maximize water delivery capability. On February 27 during the "California Water and Environmental Modeling Forum's 2007 Annual Meeting" in Asilomar, California, CH2M HILL staff made a presentation on "Voyage™" and how it has helped the Oakdale Irrigation District.

The technology used in the invented tool involves analyzing and optimizing water supply and demand scenario in a multi-purpose water usage region of a watershed. The evaluation system consists of a bundle of customizable simulation libraries of nodes and links, built on Extend programming platform. The tool provides a graphical representation of various water system components. Each water system component has a model describing its water balance and parameters for customizing the model for a scenario of the water system component.

Before joining DWR's Division of Flood Management in 2005 and the Bay – Delta Office in late 2006 as a Senior Engineer, Eusuff worked for CH2M HILL in Redding. While working there, he helped create the proprietary tool, which was issued U.S. Patent No. 7,103,479 on September 5, 2005.

"As I worked on developing this tool during the years 2004 and 2005, it required me to have an extensive and advanced understanding of different types of water demands including agricultural consumptive use, water supply systems and their efficiency, and in-depth knowledge of the simulation-optimization technique," said Eusuff. "Contributing towards the advancement of simulation-optimization technology in water resources projects was a big personal achievement for me."



Before joining DWR in 2005, Zaffar helped create a tool known as Voyage™ for CH2M HILL that can help plan and operate water supply systems efficiently.

Eusuff, who was the optimization technology expert for CH2MHILL, developed the optimization algorithm, Shuffled Frog Leaping Algorithm (SFLA), as one of the optimization routines for this technology. SFLA was developed by Eusuff as a part of his Ph.D. dissertation work at the University of Arizona. A native of Bangladesh, Eusuff earned his Bachelor of Science degree in Civil Engineering at Bangladesh University of Engineering and Technology in 1992.

He worked in Bangladesh as a Water Resources Consultant for almost two years. Then he traveled to Australia and completed his Master of Science degree in Civil Engineering from the University of Adelaide in 1995. In Australia, he researched another interesting optimization technique known as Genetic Algorithm (GA).

"The simulation-optimization technology, similar to what was used to develop "Voyage™," can also be a very helpful decision-making tool for DWR with various programs, such as the Integrated Regional Water Management Plan, the Management of Water Recycling Program, Reservoir Operation, Water Allocation Study and Consumptive Use," said Eusuff. ■

DWR'S 2006 ANNUAL AWARDS

As part of DWR's Annual Awards on January 30, 2007, the Director presented awards to recognize Department employees who have made exceptional contribution to the efficiency and effectiveness of the Department and to State Government in general. DWR congratulates the following award recipients.

Director's Award



Les Harder
Deputy Director
Executive



Nancy Saracino
Chief Deputy Director
Executive

Management Excellence Award



SUPERIOR
Don Kurosaka
Principal Engineer
Bay – Delta Office



SUPERIOR
Rod Mayer
Chief
Flood Management

Management Excellence Award



SUSTAINED SUPERIOR
Ted Frink
 Environmental
 Program Manager
 Planning and Local Assistance



SUSTAINED SUPERIOR
Theresa Lightle
 Deputy Comptroller
 Fiscal Services



SUSTAINED SUPERIOR
Earl Nelson
 Senior Environmental
 Scientist
 Flood Management



SUSTAINED SUPERIOR
Mary Smith
 Data Processing Manager III
 Technology Services

Professional Accomplishment Award



SUSTAINED SUPERIOR
Jamie Anderson
 Engineer
 Bay – Delta Office



SUSTAINED SUPERIOR
Vince Brown
 Electrical Construction
 Supervisor
 Engineering



SUSTAINED SUPERIOR
Wayne Cedidla
 Senior Mechanical Engineer
 Engineering



SUSTAINED SUPERIOR
Steve Croft
 Basis System Administrator
 Technology Services



SUSTAINED SUPERIOR
Cathy Crothers
 Senior Staff Counsel
 Office of the Chief Counsel



SUSTAINED SUPERIOR
Gordon Enas
 Senior Engineer
 Engineering



SUSTAINED SUPERIOR
Lonnie Essig
 Supervising Engineer
 Engineering



SUSTAINED SUPERIOR
Teresa Gonzalez
 Accounting Administrator II
 Fiscal Services

Professional Accomplishment Award



SUSTAINED SUPERIOR

Kevin Gray
Engineer
Engineering



SUSTAINED SUPERIOR

Stephen Guthrie
Electrical Construction
Supervisor I
Engineering



SUSTAINED SUPERIOR

Lorraine Hall
Associate Governmental
Program Analyst
Management Services



SUSTAINED SUPERIOR

William Hom
Senior Engineer
Flood Management



SUSTAINED SUPERIOR

Soheil Loghmanpour
Supervising Mechanical
Engineer
Engineering



SUSTAINED SUPERIOR

Stefan Lorenzato
Staff Environmental Scientist
Planning and Local Assistance



SUSTAINED SUPERIOR

Lori Mathis
Sr. Hydroelectric Power
Utility Engineer
Operations and Maintenance



SUSTAINED SUPERIOR

Maury Miller
Hydroelectric Plant
Operations Superintendent
Operations and Maintenance



SUSTAINED SUPERIOR

Michael Miller
Associate Governmental
Program Analyst
Public Affairs Office



SUSTAINED SUPERIOR

Michael Mosbacher
Senior Engineer
Planning and Local Assistance



SUSTAINED SUPERIOR

Parviz Nader-Tehrani
Senior Engineer
Bay – Delta Office



SUSTAINED SUPERIOR

Tina Nycum
Associate Administrative
Analyst
Fiscal Services

Professional Accomplishment Award



SUSTAINED SUPERIOR
Jim Peddy
 Construction Supervisor III
 Engineering



SUSTAINED SUPERIOR
Greg Rowsey
 Personnel Officer
 Management Services



SUSTAINED SUPERIOR
Fariba Shahmirzadi
 Recruitment & Selection
 Services Manager
 Management Services



SUSTAINED SUPERIOR
Greg Smith
 Staff Environmental Scientist
 Planning and Local Assistance



SUSTAINED SUPERIOR
Robert Suits
 Senior Engineer
 Bay – Delta Office



SUSTAINED SUPERIOR
Wendy Underhill
 Staff Information
 Systems Analyst
 Technology Services

(no photo available)

SUSTAINED SUPERIOR
Christina Kuo
 Senior Engineer
 Planning and Local Assistance

(no photo available)

SUSTAINED SUPERIOR
Tio Zasso
 Supervising Hydroelectric
 Power Utility Engineer
 Operations and Maintenance

Technical Accomplishment Award



SUSTAINED SUPERIOR
Stephen Graham
 Water Resources
 Engineering Associate
 Operations and Maintenance



SUSTAINED SUPERIOR
Richard Jones
 Assistant Utility Craftworker
 Superintendent
 Operations and Maintenance



SUSTAINED SUPERIOR
Thom Lewis
 Graphic Designer
 Public Affairs Office



SUSTAINED SUPERIOR
Marilee Talley
 Research Writer
 Planning and Local Assistance

Office Services Accomplishment Award



SUSTAINED SUPERIOR

Karen Buckner
Executive Assistant
Executive



SUSTAINED SUPERIOR

Debbie De Anda
Staff Services Analyst
Management Services



SUSTAINED SUPERIOR

Barbara Moore
Business Service Assistant
California Energy Resources
Scheduling



SUSTAINED SUPERIOR

Nancy Pashugin
Office Technician
Planning and Local Assistance



SUSTAINED SUPERIOR

Jane Schafer-Kramer
Executive Secretary
Bay – Delta Office



SUSTAINED SUPERIOR

Jillian Stanley
Publications Desk Clerk
Management Services



Above: At San Joaquin Field Division, DWR's 2006 Apprentice Graduates received their graduation awards. Left to Right (Front Row) Steve Salcido, Saul Medina, Trina Werly-Seemster, Michael Evenson, Manuel Barcellos, Mario Garcia, and Heather McCaig. (Back Row) Dennis Lundy and Sandra Acosta, both from International Union of Operating Engineers, Chief of Operations and Maintenance Carl Torgersen, Deputy Director Ralph Torres, and Operations and Maintenance Training Center Supervisor Judy Cole.

Apprentice Graduates of 2006

Manuel Barcellos

San Luis Field Division
Hydroelectric Plant Mechanic

Heather McCaig

Oroville Field Division
Hydroelectric Plant Electrician

Michael Evenson

Oroville Field Division
Hydroelectric Plant Mechanic

Steve Salcido

Southern Field Division
Hydroelectric Plant Electrician

Mario Garcia

San Joaquin Field Division
Hydroelectric Plant Mechanic

Trina Werly-Seemster

Delta Field Division
Hydroelectric Plant Mechanic

Saul Medina

San Joaquin Field Division
Hydroelectric Plant Electrician

Training 2006 Awards

By Sean Walsh

On August 23 and 24, 2006, the Training Office held the annual Training Coordinator Workshop. This workshop is scheduled in August every year so that the Training Coordinators will have the most current information and policies when they begin the year's Appraisal and Development program (A&D). Thirty-seven of the Department's Training Coordinators attended the two-day workshop to be advised of the changes and revisions to the forms and procedures used for training. The workshop also addressed the many questions surrounding the annual A&D program. The interaction and information sharing among the Training Coordinators is also a very valuable element of the Training Coordinator Workshops.

The Training Office depends upon the knowledge, experience and hard work of the Training Coordinators who attended the workshop, as well as the rest of the over 70 Department Training Coordinators, to keep DWR's training programs and A&D program working smoothly.

Below: Left to Right (Front Row) Mary-Ann Bennyhoff, Rose Dulay, Rosette Hall, Michelle Rivera, Stacy Garrett, Laura Nelson, Lynne Esparza, Tina Glorioso, Rebecca Martello, Deanna Wilkes, Kari Carroll, Regena Ivory. (Middle Row) Darlene Quinn, Johnie Hill, Teresa Kerner, Debbie Greco, Margarita Luna, Theresa Cuyar, Olivia Moreno, Shirley Tobias, Cathy Shannon, Ruthie Velasquez, Robin Storey, Lorraine Pendlebury, Jane Schafer-Kramer, Narkesia Nelson, Ramona Malinowski, Nannette Chester, Veronica Banuelos (Back Row) Delores Alejo, Susan Williams, Gia Barrera, Dana Billy, Chris Calhoun, Lynda Parrish, Elizabeth Wilson, Tracy Redifer, Gareth Johnson, Andrea Geremia.

2006 Trainers of the Year

DWR's Governance Board devoted part of its December 4 meeting to acknowledge nine DWR employees for their contribution to the Department's training program.

Governance Board Chair, **Aileen Tokunaga**, presented four employees with the Training Team of the Year Award. **Richard Pendleton, Robert Nozuka, Shawn Mayr and Dave Schaa**p were recognized for the time and effort they spent developing and conducting the "Boat and Motor, Class A" course for the Resources Assessment Branch of Central District.

Governance Board Vice Chair, **Rich Sanchez**, presented the award for Training Coordinator of the Year to **Jennifer Davis-Ferris**. Jennifer received the award for her initiation of design changes for the DWR Form 4142, Training and Event Request. She worked with the Training Office and Management Analysis Office to help make the form more readily understandable and usable.

The Training Unit of the Year was awarded to **Alan Arroyo, Will Murray and Angel Rodriguez** of the Audio Visual Equipment Unit for the prompt and professional services they provided in creating audio and visual feeds between two rooms enabling a greater number of employees to participate in the State and Federally mandated Emergency Preparedness training.

The Training Office also presented an award for Outstanding Technical Support to **Scott Bains** Jordan for his exceptional support and imagination in finding solutions to SAP challenges facing the Training Office.



2006 Volunteer Trainers

The Training Office would like to recognize and thank the many volunteer trainers who help keep DWR's excellent training programs running smoothly. Without these instructors, who give generously of their time and knowledge, DWR could not keep up its high level of employee training.

Linda Ackley
Judy Alexander
Dave Anderson
Michael Anderson
Tom Beiler
Tracie Billington
Mike Bingaman
Roxanne Boone
James Brantley
John Bunce
Marla Burnett
Rick Burnett
David Canchola
Susie Cano-Guzman
Larry Carmo
Julie Carrasco-Minton
Pam Ceccarelli
Gail Chong
Darren Choyce
Bill Collins
John Crouch
Linda Currie
Allan Davis
Kimberly Deane
Cosme Diaz
Rebecca Dominguez
Jennifer Dong
Lorinda Drysdale
Robert Duffey
Michael Dunn
Robert Duvall
Sonny Eboigbe
Mike Ekern
Don Elmore

Danny Erreca
Richard Flores
Myra Galvez
Gary Garcia
Victor Garcia
Jennifer Geregthy
Joanna Gonzales
Robert Grauberger
Dave Hart
Pam Hart
Carl Hauge
B G Heiland
Herb Hereth
Jon Hickey
Bob Highhill
Norm Hill
Tracy Hinojosa
Helene Hiromoto
Ron Ingle
Curtis Johnston, Sr.
Bud Jones
Tim Jones
Brenda Journagan
Kristie Joyce
Dave Kearney
John King
Kathie Kishaba
Karina Kugel
Curtis Lannom
Shannon Lee
Boone Lek
Carrol Leong
Latrice Leslie
Bill Mahon

> > > continued on next page



Top Photo: (Left to Right) Training Team of the Year Award included Robert Nozuka, Dave Schaap, Aileen Tokunaga, Shawn Mayr and Richard Pendleton.

Middle Photo: Governance Board Vice Chair Rich Sanchez (right) presented award for Training Coordinator of the Year to Jennifer Davis-Ferris

Bottom Photo: (Left to Right) The Training Unit of the Year included Alan Arroyo, Will Murray and Angel Rodriguez.

2006 Volunteer Trainers

Isacc Manuel
Scott Martin
Ed Mentz, Jr.
Jennifer Metcalf
Maurice Miller
Sheryl Moore
Scott Morgan
Erik Moyer
Steve Nemeth
Lien Nhieu
Karen Parr
Jim Pearson
Richard Pendleton

Tracy Pettit
Stephanie Pettitt
Herman Phillips
Raquelana Pina
Michael Placencia
Andy Pollak
Tawnly Pranger
Gwyneth Raymer
Duane Rickard
Andrea Riley
Dave Rizzardo
Jessica Roles
Al Romero

Maury Roos
Greg Rowsey
Janet Marie Salinas
Phillip Sanchez
David Sandino
David Schaap
Sharin Schellbach
Fariba Shahmirzadi
Susan Sims
Garry Smith
Gerald Snow
Mark Soto
Stephani Spaar

James Stephenson
Joseph Strain
Donald Strickland
Clay Thomas
Ron Thomas
Aileen Tokunaga
Lisa Toms
Craig Trombly
Gabino Velazquez
Richard Willoughby
Ron Wright
Derek Yagi
Tio Zasso

25 Years of Service



Derrick Adachi
Environmental Services
Environmental Program
Manager I
March 2007



Dana Billy
O&M's Southern Field Division
Management Services
Technician
March 2007



Wayne Blackburn
Engineering
Transportation Surveyor
January 2007



Sina Darabzand
Bay – Delta Office
Senior Engineer
January 2007



David Gutierrez
Safety of Dams
Chief
February 2007



Johnnie Hill
San Joaquin District
Staff Services Analyst
October 2006



Tariq Kadir
Bay – Delta Office
Senior Engineer
February 2007



Peggy Lehman
Environmental Services
Staff Environmental Scientist
February 2007

Professional Exam Graduates

Professional Land Surveyor



Clayton Guiraud
Engineering
Transportation Surveyor
September 2006

Professional Engineer



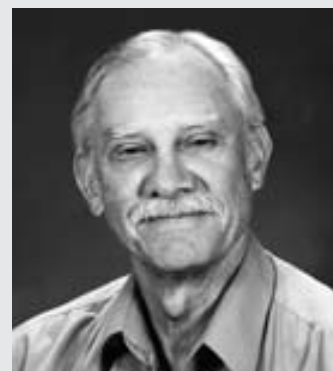
Michael Anderson
Flood Management
Engineer/State Climatologist
April 2006

Professional Engineers

Mark Castillo
Engineering
Engineer
July 2006

Jeremiah McNeil
Flood Management
Engineer
June 2006

40 Years of Service



Joe Kimbriel
Operations and Maintenance
Senior Control Engineer
March 2007

25 Years of Service



Don Medina
O&M's Southern
Field Division
Hydroelectric Plant Operator
March 2007



Marcos Moreno
O&M's Southern
Field Division
Water Operations Technician II
January 2007



Trudy Payne
O&M's Oroville Field Division
Water Resources
Engineer Associate
March 2007



Maurice Rubio
Southern Field Division
Water Resources Technician II
February 2007



Tom Shannon
O&M's Oroville Field Division
Hydroelectric Plant Electrician II
January 2007



Artemio Tapia
Engineering
Construction Supervisor II
January 2007



Anthony Van Buren
Operations and Maintenance
HEP Mechanic I
March 2007

O&M (Operations and
Maintenance)

Academic Achievements

Congratulations to Division of Environmental Services employees:

Sacramento State

Laura Patterson
M.S. Biological Sciences
(2006)
Christopher Huitt
M.S. Biological Sciences
(2004),

Alex Andrade
B.A. in Psychology (2006)
Kevin Matsuhira
B.S. in Business Administration (2006),

University of California, Davis

Cindy Messer
M.S. degree in Biological
Conservation (2006),
Lenny Grimaldo
Passed oral qualifying exams
for his Ph.D in Ecology

McGeorge School of Law

Hans Walter
J.D. Valedictorian

Birth Announcement

Congratulations to DWR parent:

Michael Anderson, State Climatologist in the Division of Flood Management, has a daughter named Emily Elizabeth,

who was born on March 15 weighing 6 pounds, 11 ounces and measuring 19.5 inches long.

Retirements

Ben Williams

Ben Williams enjoyed keeping up with or ahead of changing technology during his six years as Chief of DWR's Division of Technology Services. Under Ben's guidance, DTS' 120 employees worked on projects, including the implementation of a department-wide Microsoft Exchange and Active Directory, the first and second phases of the DWR Portal Project (including the creation of AquaNet), upgrades to the DWR Data Center, GoodLink mobile e-mail system, and the installation of a new VPN appliance to allow secure meetings via Internet.



"I have really enjoyed working with all the people in DWR," said Ben. "The staff in DTS, in my opinion, is second to none."

Ben's DWR career began in 2000 as Chief of Technology Services. Some of his other memorable assignments included establishing DTS as an independent division, serving on the DWR Strategic Business Plan Committee, and the Next Wave SAP Migration project.

"The Next Wave SAP Migration project was sort of my 'career capper.' It was a good project and the dedication was excellent," said Ben. "It provides a good foundation for the future of the Department."

Before starting his 33 years of State service, Ben, a native of San Diego, worked as an Assistant Manager for an Import Retail Firm in San Diego.

In 1973, with the Department of Industrial Relations in San Francisco, he researched and wrote economic studies on California's economy as an Economic Analyst and subsequently that Department's first Budget Analyst. After two years, he joined the California Coastal Commission as the Administrative Officer. In 1979, he moved to Sacramento as Deputy Director for the Governor's Office of Planning and Research where he stayed for 20 years. As Deputy Director, he was the final report writer for the Governor's Commission on Educational Quality. Ben also coordinated federal block grant implementation for California in the 1980's. In addition, He was the State Coordinator for the reuse of 30 closing military bases.

In 1989, Ben was the Staff Director for the Commission that investigated transportation structure failures (the Cypress freeway, Bay Bridge, and others) during the Loma Prieta earthquake. In 1998, Ben became Executive Director for the Commission on Local Governance for the 21st Century.

Ben is a graduate of California State University at Hayward with a Master of Public Administration and of San Diego State University with a Bachelor of Science in Business Management. He also attended the John F. Kennedy School of Government at Harvard University.

During his retirement, Ben plans to stay busy by being a consultant to State agencies on IT and organizational issues and to vendors on procurement strategies. ■

Retirements

Leandro August

Oroville Field Division
Water Resources Engineering
Associate

Dennis Babb

Oroville Field Division
Utility Craftsworker
Superintendent

Joseph Bates

Southern Field Division
Building Maintenance Worker

William Bennett

Office of Water Use Efficiency
C.E.A.

David Brown

Environmental Services
Senior Environmental
Scientist

Geraldine Cook

California Energy Resources
Scheduling
Office Technician (Typing)

Vicki Davidson

Southern Field Division
Office Assistant (Typing)

Warren Dibben

Engineering
Water Resources Technician II

Raymonda Dulin

Technology Services
Office Technician (Typing)

Doris Fodge

Central District
Office Technician (Typing)

Donaciano Garza

San Joaquin Field Division
Building Maintenance Worker

George Gomez

San Joaquin Field Division
Control System Technician III

Jimmie Gowen

Oroville Field Division
Maintenance Mechanic

Susan Haight

Engineering
Senior Land Agent (Supv.)

Michael Harhen

Oroville Field Division
Mobile Equipment
Superintendent I

William Harrison

Southern Field Division
Water Resources Engineering
Associate

Ronald Hopkins

Engineering
Transportation Surveyor
(Caltrans)

Robert Huss

Operations & Maintenance
Senior Water And Power
Dispatcher

Alice Jones

Technology Services
Staff Programmer Analyst

Ronald Langford

Southern Field Division
Electrical-Mechanical Testing
Technician II

Robert Lanini

Operations & Maintenance
Senior Water and Power
Dispatcher

Floyd Lederer

Fiscal Services
Senior Accounting Officer

Curtis Levine

Oroville Field Division
Water Services Supervisor

Margarita Luna

Technology Services
Office Assistant (Typing)

John Mescher

Engineering
Transportation Surveyor
(Caltrans)

Daniel Peterson

Operations & Maintenance
Environmental Program
Manager I (Supv.)

Thomas Scholl

Oroville Field Division
HEP* Electrician I

Terry Schultze

State Water Project Analysis
Office
Administrative Officer II,
Resources Agency

Lynette Stephens

Executive
Staff Services Analyst

Euela Taber

Central District
Water Resources Technician II

Judith Topper

Technology Services
Systems Software Specialist II
(Technical)

John Trageser

Delta Field Division
HEP* Mechanical Supervisor

Arthur Vickers

San Joaquin Field Division
Assistant Utility Craftsworker
Superintendent

Otto Vogelsang Jr.

Planning & Local Assistance
Senior Environmental
Scientist

Thomas Young

San Luis Field Division
Water Services Supervisor

*Hydroelectric Plant

** Hydroelectric Power

New Hires

Abdelkarim Abulaban

San Joaquin District
Engineer

Rickey Accardo

San Luis Field Division
HEP* Operator Apprentice

Sonya Aguallo

Executive
Staff Services Analyst

Chris Almazan

Management Services
Business Service Officer I
(Supv.)

Khalid Ameri

Bay – Delta Office
Engineer

Rodney Aoki

Executive
Staff Services Analyst

Claudio Avila

Flood Management
Engineering Geologist

Youssef Awad

Flood Management
Engineer

Charles Beat

Southern Field Division
HEP* Operator

Tom Beiler

Management Services
Staff Services Manager I

Kenneth Biondi

Flood Management
Associate Governmental
Program Analyst

Donelle Black

Northern District
Office Assistant

Theresa Bradley

Fiscal Services
Accounting Officer

Alex Bumgarner

Flood Management
Maintenance and Service
Occupational Trainee

Jarod Burke

Delta Field Division
HEP* Electrician Apprentice

Domingo Cabrera Jr.

Southern Field Division
Utility Craftsworker

Everett Carter

San Luis Field Division
Utility Craftsworker

> > continued on page 50

INFORMATION PROVIDED BY DWR'S PERSONNEL OFFICE

New Hires

Jeffery Chambers
Engineering
Transportation Surveyor
(Caltrans)

Solomon Choi
Flood Management
Engineer

Andre Clay
San Joaquin Field Division
HEP* Operator Apprentice

Rebecca Confer
Management Services
Office Assistant

Aaron Cover
San Joaquin Field Division
Utility Craftworker
Apprentice

James Cracraft
Delta Field Division
Utility Craftworker

Gina Craig
Management Services
Office Technician (Typing)

Darin Criswell
San Joaquin Field Division
HEP* Mechanic I

David Crothers
Engineering
Associate Cost Estimator

Claudia Crowley
Management Services
Staff Services Analyst

Michael Davis
Oroville Field Division
HEP* Operator Apprentice

Inez Deorsene
Executive
Office Technician (Typing)

Melissa Doss
Management Services
Office Assistant (Typing)

Milton Doucette Jr.
Southern Field Division
HEP* Electrician I

Eddris Duggan
Planning & Local Assistance
Office Technician (Typing)

Paul Dunlap
Operations & Maintenance
Engineer

John Dunnigan
Executive
Staff Counsel

Oscar Dupont
Southern Field Division
HEP* Electrician Apprentice

Jon Ericson
Flood Management
Engineer

Edward Fama
Executive
Staff Services Analyst

Dagnachew Fanta
Engineering
Engineer

Dana Fernandez
Flood Management
Associate Programmer
Analyst

Efren Flores
Delta Field Division
Utility Craftworker
Apprentice

Scott Flory
Central District
Research Analyst I (GIS)

Jared Frantzich
Central District
Environmental Scientist

David Galleano
Southern Field Division
HEP* Operator

Charles Garrett
Engineering
Office Technician (Typing)

Eugene Garrett
San Joaquin Field Division
HEP* Operator Apprentice

Martin Gerber
Central District
Engineer

Roland Geronilla
Southern Field Division
HEP* Operator

Charles Gill
Oroville Field Division
Heavy Equipment Mechanic

Scott Gilman
Southern Field Division
Utility Craftworker

Crisanta Gonzalez
Oroville Field Division
Staff Services Analyst

Michael Goularte
San Luis Field Division
Utility Craftworker

Elissa Gruner
Flood Management
Senior Meteorologist

Leticia Gutierrez
Executive
Office Assistant (Typing)

Steven Haggard
San Luis Field Division
Utility Craftworker
Apprentice

Gurmeet Hajrah
Flood Management
Associate Programmer
Analyst

Douglass Hill
Southern Field Division
Heavy Equipment Mechanic

Donald Hoirup, Jr.
Engineering
Engineering Geologist

Cindy Holbus
Flood Management
Office Technician (Typing)

George Huerta
Delta Field Division
HEP* Electrician I

Cory Hutton
Flood Management
Maintenance and Service
Occupational Trainee

Kanta Jasmine
Engineering
Architectural Designer

Karen Joelson
Executive
Staff Counsel

Dustin Jones
Bay – Delta Office
Engineer

Colin Kark
Flood Management
Engineering Geologist

John Kastner
Southern Field Division
HEP* Operator Apprentice

Abdul Khan
Operations & Maintenance
Engineer

Matthias Kimball
Engineering
Mechanical Engineer

John King
San Joaquin Field Division
HEP* Electrician I

James Kitch
San Joaquin District
Environmental Scientist

Gregory Kramer
Southern Field Division
HEP* Mechanic I

Gina Ladd
Management Services
Office Assistant (Typing)

Sheila Lanham
Northern District
Office Technician (Typing)

Mark Law
Operations & Maintenance
Staff Programmer Analyst

Brian Leary
Operations & Maintenance
Senior Information Systems
Analyst

Michele Lee
Management Services
Office Technician (Typing)

Tolifer Lewis
Environmental Services
Staff Services Analyst

Yiguo Liang
Bay – Delta Office
Engineer

Qinqin Liu
Environmental Services
Environmental Scientist

Elaine Lopes
San Joaquin District
Office Technician (Typing)

INFORMATION PROVIDED BY DWR'S PERSONNEL OFFICE

New Hires

Ignacio Lopez-Alvarez
Operations & Maintenance
Senior HEP** Utility Engineer

Peter Manukyan
San Joaquin District
Junior Engineering Technician

Seth Marsh
Delta Field Division
HEP* Electrician Apprentice

Robert Martin
Oroville Field Division
Utility Craftsworker
Apprentice

Henry Mayer
San Joaquin Field Division
Utility Craftsworker

Marjorie McNeill
Engineering
Office Assistant (Typing)

Daniel Mendoza
Delta Field Division
Utility Craftsworker

Wolfgang Meyersohn
Flood Management
Engineer

Daniel Monterrubio
Engineering
Mechanical Engineer

Marcos Moreno
Southern Field Division
Junior Engineering Technician

Michelle Morrow
Executive
Staff Counsel

Jane Mountjoy
California Energy Resources
Scheduling
Office Technician (Typing)

Charles Neuman
Engineering
Transportation Surveyor
(Caltrans)

Gail Newton
Flood Management
Environmental Program
Manager I (Supv.)

Frank Nickel
Executive
Senior Legal Typist

Michael Noel
Flood Management
Associate Governmental
Program Analyst

Juan Ocegueda Jr.
San Joaquin Field Division
HEP* Mechanic Apprentice

William O'Leary
Flood Management
Engineer

Andrew Quinto
Southern Field Division
HEP* Electrician I

Linda Ragnetti
Engineering
Office Assistant (Typing)

James Rathke
Operations & Maintenance
Water Resources Engineering
Associate

Shannon Redwine
San Joaquin Field Division
Staff Services Analyst

Andrew Reising
Flood Management
Engineer

Edward Roberts
Operations & Maintenance
Electrical-Mechanical Testing
Technician I

John Robinson
Southern Field Division
Junior Engineering Technician

Anthony Rodriguez
Southern Field Division
Utility Craftsworker
Apprentice

Bonnie Roy
Management Services
Office Assistant (Typing)

Joel Rubi
Delta Field Division
Warehouse Worker

Ahmad Sadighi
Engineering
Engineer

Nady Said
Engineering
Construction Supervisor I

Luis Sandoval
San Joaquin Field Division
Building Maintenance Worker

Gregory Sanfilippo
Engineering
Transportation Surveyor
(Caltrans)

Tiffany Schmid
Environmental Services.
Associate Environmental
Planner (Archeology)

Frances Schulte
San Joaquin District
Office Technician (Typing)

Megan Sheely
Planning & Local Assistance
Environmental Scientist

Linda Slavik
Flood Management
Associate Governmental
Program Analyst

Vincent Smith
Southern Field Division
Heavy Equipment Mechanic

Sasan Soltani
Operations & Maintenance
Engineer

Randy Somers
San Joaquin Field Division
Building Maintenance Worker

Arnoldo Soto
Delta Field Division
HEP* Operator Apprentice

Patricia Stanley
Bay – Delta Office
Office Technician (Typing)

Robyn Starr
Engineering
Research Analyst I (GIS)

John Stephens
Central District
Senior Engineer

Jannette Stetson-Buck
Southern Field Division
Office Assistant (Typing)

Julie Surjan
Management Services
Personnel Specialist

Zachariah Trublood
Operations & Maintenance
Staff Information Systems
Analyst

Jason Valdez
San Luis Field Division
Utility Craftsworker
Apprentice

Michael Van Raalte
Southern District
Junior Engineering Technician

Ram Verma
California Energy
Resources Scheduling
Senior HEP** Utility Engineer

Andrew Vierra
Flood Management
Utility Craftsworker

Thomas Walden
Delta Field Division
HEP* Electrician I

Laurie Walker
Engineering
Right of Way Agent

Nancy Westover
San Joaquin Field Division
HEP* Operator

Scott Williams
Operations & Maintenance
Water Resources Engineering
Associate

Olivia Williamson
Fiscal Services
Associate Budget Analyst

Lorna Wilson
State Water Project Analysis
Office
Research Writer

Brett Wyckoff
Planning & Local Assistance
Engineering Geologist

Wenhua Yu
Southern District
Engineer

INFORMATION PROVIDED BY DWR'S PERSONNEL OFFICE

Promotions

Christina Acken

Executive
Supervising Engineer

David Alexander

California Energy
Resources Scheduling
Supervising HEP** Utility
Engineer

Vince Alvidrez

San Joaquin Field Division
HEP* Electrician II

Jamie Anderson

Bay – Delta Office
Senior Engineer

David Anderson

Executive
Staff Counsel IV

Youssef Awad

Flood Management
Senior Engineer

Veronica Banuelos

Engineering
Office Technician (Typing)

Gina Benigno

Environmental Services
Environmental Scientist

Mike Bingaman

Management Services
Associate Business
Management Analyst

Richard Bostick

Southern Field Division
Mobile Equipment
Superintendent I

Delores Brown

Environmental Services.
Environmental Program
Manager II

Laura Castro

San Joaquin District
Environmental Scientist

Karen Cole

Technology Services
Staff Information Systems
Analyst

Rebecca Confer

Executive
Office Assistant (Typing)

Muzaffar Eusuff

Bay – Delta Office
Senior Engineer

Michael Evenson

Delta Field Division
HEP* Mechanic I

Sandra Firch

Management Services
Associate Management
Analyst

Larry Fox

Operations & Maintenance
Senior Water and Power
Dispatcher

Loreto Garcia

Operations & Maintenance
Water and Power Dispatcher

Mario Garcia

San Joaquin Field Division
HEP* Mechanic I

Diana Gillis

Delta Field Division
HEP* Mechanical Supervisor

Teresa Gonzalez

Fiscal Services
Accounting Administrator II

Samson Haile-Selassie

Flood Management
Senior Engineer

Coe Hall

Operations & Maintenance
Principal HEP** Utility
Engineer

William Harrell

Environmental Services
Senior Environmental
Scientist

Mitchell Howard

Southern Field Division
HEP* Mechanic I

Terry Howell

Technology Services
Staff Information Systems
Analyst

Barak Howze

San Luis Field Division
Electrical-Mechanical Testing
Technician II

Philip Huckobey

Northern District
Junior Engineering Technician

Eileen Hue

Technology Services
Staff Information Systems
Analyst

Christopher Huitt

Flood Management
Staff Environmental Scientist

Kusum Jain

Fiscal Services
Senior Accounting Officer

Kanta Jasmine

Engineering
Architectural Designer

Jodi Johnston

San Joaquin Field Division
Warehouse Worker

Mario Juarez

San Joaquin Field Division
Warehouse Worker

Michael Kelly

Technology Services
Staff Information Systems
Analyst

Laurence Kerckhoff

Executive
Staff Counsel III

Timothy Kerr

Flood Management
Senior Engineer

Gwen Knittweis

State Water Project Analysis
Office
Supervising Engineer

Joanne Koopman

Southern Field Division
Business Service Officer I

Karina Kugel

Management Services
Associate Personnel Analyst

Joel Ledesma

Operations & Maintenance
Supervising Control Engineer

Aric Lester

Northern District
Senior Environmental
Scientist

Earnie Lorren

San Joaquin Field Division
HEP* Electrician I

Douglas Macmullen, Jr

State Water Project
Analysis Office
Senior HEP** Utility Engineer
(Supv.)

Ernie Magana

Operations & Maintenance
Water and Power Dispatcher

George Mahnke

Flood Management
Supervising Engineer

Paul Marshall

Bay – Delta Office
Principal Engineer

David Martasian

Flood Management
Staff Environmental Scientist

Victoria Mathews

Southern Field Division
Electrical-Mechanical Testing
Technician I

Christopher Mattos

Operations & Maintenance
Supervising HEP** Utility
Engineer

Rodney Mayer

Flood Management
C.E.A.

Heather McCaig

Oroville Field Division
HEP* Electrician I

Maureen McGee Rotondo

Planning & Local Assistance
Staff Environmental Scientist

Saul Medina

San Joaquin Field Division
HEP* Electrician I

Sergio Mendoza

Flood Management
Utility Craftworker Supv.

Javier Miranda

Bay – Delta Office
Environmental Scientist

Erik Moyer

Fiscal Services
Senior Accounting Officer

David Mraz

Flood Management
Principal Engineer

Lien Nhieu

Fiscal Services
Senior Accounting Officer
(Supv.)

INFORMATION PROVIDED BY DWR'S PERSONNEL OFFICE

Promotions

Brian Niski

Planning & Local Assistance
Staff Information Systems
Analyst

Lorraine Pendlebury

Executive
Staff Services Analyst

Irma Peralez

Management Services
Personnel Supervisor I

Steven Peterson

Engineering
Staff Information Systems
Analyst

Jatinder Punia

Executive
C.E.A.

Sergio Quintero

Southern Field Division
HEP* Mechanic I

Scott Rebelo

Central District
Junior Engineering Technician

Jessica Roles

Operations & Maintenance
Administrative Officer II,
Resources Agency

David Roose

Operations & Maintenance
Chief of Utility Operations

Ulysses Salazar

California Energy
Resources Scheduling
Associate HEP**
Utility Engineer

David Samson

Operations & Maintenance
Principal Engineer

Richard Sanchez

Engineering
C.E.A.

David Sandino

Executive
Staff Counsel IV

Sharin Schellbach

State Water Project
Analysis Office
Associate Governmental
Program Analyst

Cathy Shannon

Oroville Field Division
Administrative Officer I,
Resources Agency

Karin Shine

Executive
Staff Counsel III

Laurie Soule

Planning & Local Assistance
Staff Environmental Scientist

Samuel Sublett

Engineering
Construction Management
Supv.

Fransisca Sugandi

Fiscal Services
Associate Accounting Analyst

Andrew Summers

Technology Services
Staff Information Systems
Analyst

Jessica Sutherland

Environmental Services
Environmental Scientist

Charlene Tallman

Fiscal Services
Senior Accounting Officer
(Supv.)

Carl Torgersen

Operations & Maintenance
C.E.A.

Tim Tran

Bay – Delta Office
Associate Information
Systems Analyst

Dena Uding

Flood Management
Supervising Engineer

Edwin Ulmer

Executive
Staff Counsel III

Betsy Vierra

Management Services
Executive Secretary I

Trina Werly-Seemster

Delta Field Division
HEP* Mechanic I

Daniel Whisman

Engineering
Principal Engineer

Carol White

State Water Project
Analysis Office
Research Analyst II

Bonnie Young

Delta Field Division
HEP* Operator Apprentice

Bih Yuan

Operations & Maintenance
Associate Control Engineer

INFORMATION PROVIDED BY DWR'S PERSONNEL OFFICE

Obituaries

Richard Alan (Bud) McGuire

Richard Alan (Bud) McGuire, a retired Water Resources Engineering Associate, passed away on March 5 in Sacramento.

Before joining DWR's Central District as an Engineering Aid II in 1963, Bud graduated from Nevada Union High School in 1960 and attended Cal-Poly University. He became a Water Resources Technician I in 1966 and an Applied Science Programmer II in 1974. Bud was part of DWR's bowling league in the 1980's. In 2000, he retired after more than 36 years of DWR service.

"Bud was all institutional knowledge that he gained after working many years in the hydrology trenches. Bud was also

the only one I ever knew that knew more about budgeting than the Budget Office, and instrumental in keeping our section in the black, year after year," said **Toccoy Dudley**, Director of Butte County Department of Water and Resource Conservation. "Above all, Bud was a character and like by everyone."

He was also an active member of the Grass Valley Elks Lodge No. 538 for 45 years. Bud, who was an avid Kings fan, held season tickets for the past seven years and has attended games since 1996.

Bud is survived by his wife of 38 years, Todi, two daughters, a son, and grandchildren. ■

> > > continued on next page

Obituaries

Robert M. Edmonston

Robert M. Edmonston, a former State engineer active in planning studies for California's State Water Project and who later founded a widely-known water consulting firm, died December 6, 2006, at his Southern California home. He was 81 and had battled cancer.



His father, **Arthur D. Edmonston**, was a State Engineer and an influential figure in developing California water resources after World War II. His May 1951 plan was a basic blueprint for what became the SWP. The elder Edmonston served as Chief of the Division of Water Resources from 1950 to 1955. The Edmonston pumping plant that lifts SWP water over the Tehachapi Mountains was named in his honor.

A 1947 engineering graduate of the University of California at Berkeley, where he lettered in football and track, Bob followed his father's career path by becoming an engineer for the State. That year, Bob joined the State Division of Water Resources.

Soon he was directing studies on the route, location and capacity of future SWP aqueduct structures in Southern California. Bob was a civil engineer with the water division in 1956 when it was reorganized into a new Department of Water Resources. He served as Chief of Planning, Design and Construction in the Southern District as he ended a 12-year State career.

In 1959, Bob entered the private sector, cofounding Bookman-Edmonston Engineering, Inc., a firm specializing in water resource engineering and planning. As president, he supervised planning, design and project construction in California and Arizona, and abroad in Mexico, Costa Rica and Sudan. Headquartered in Glendale, the firm expanded, opening offices in Sacramento, Bakersfield, Phoenix, AZ., and Washington, DC.

Bob sold the firm and retired in 1994. After 40 years' residence in Pasadena, Bob and wife, Ann, whom he'd met at Cal, moved to Montecito, where he served as president of the Montecito Water District in 2005–2006. An avid hunter and traveler, Bob enjoyed seeing his grandsons, John and Brian, play football.

Bob was born in Sacramento on March 24, 1925. He attended local public schools and Stanford University before graduating from UC Berkeley with a Bachelor of Science degree in civil engineering. Before finishing college, he served three years on active duty in the US Navy, from 1943 to 1946.

He is survived by his wife, Ann, whom he married 56 years ago; son, John McCombie Edmonston; daughter-in-law, Susan; two grandsons; sister-in-law, Joyce Edmonston of Bakersfield, and cousin, Jane Calvin of Sacramento.

Private services were held in December. Donations may be made to the Cancer Center of Santa Barbara or the El Montecito Presbyterian Church. ■

Donald R. Turner, Sr.

Donald R. Turner, Sr., retired HEP Mechanic II of San Joaquin Field Division passed away on December 17, 2006.

Don joined the U.S. Navy and upon his discharge he worked as a Power Plant Mechanic for the Department of Water and Power for the city of Pasadena, California, for 17 years. He joined DWR



in 1970 where he worked in many capacities. At DWR, he worked at Edmonston, Buena Vista, Las Perillas and Badger Hill. Don also assisted engineers in the design of the pump that pumped the water over the Grapevine. He also maintained many check drainage pumps and turn-out facilities along the California Aqueduct. Don retired from DWR in 1995.

He was quiet and reserved but well liked and respected. He was a great teacher and had lots of patience and enjoyed sharing his knowledge, stated his eldest son, Alan. Alan commented, "One funny thing about Dad, his co-workers didn't want to tackle him with reading his daily newspaper until after he read it." The newcomers had to be told, "Don't ever mess with this newspaper. That's Don's newspaper." After Don read it, then it was okay for others to read it. While working, Don was very meticulous about his tools. He always made sure that he had the best tools possible to do the job properly. This was even noted in one of his progress reports.

Away from the job Don was an avid baseball fan. He played overhand fast pitch softball and for many years coached little league baseball. His favorite baseball team was

Obituaries

the Los Angeles Dodgers. He was also a die-hard football fan. In the 1970's, he had season tickets to the L.A. Rams for over 10 years and it was during this time that he arranged his work schedule around those games.

Don was a World War II buff. There were more books and videos in his personal library collection that covered World War II than found in most public libraries. He was also a lover of jazz music. He had a collection of blues and jazz that ranged from The Big Bands of Count Basie, Duke Ellington, Clifford Brown and Cannonball Adderly. He would often be found sitting in his den reading or listening to his music.

Don is survived by his wife of 55 years, Velma Turner, four sons Alan, Steven (Evelyn), Donald, Jr. (Antoinette), and Phillip (Lisa), one sister, Darlene Turner, eight grandchildren, four great-grandchildren, two nephews and many other cousins, aunts, uncles and loving, caring friends. ■

Kenneth Craig

DWR Water Resources
Engineering Associate

Kenneth Craig passed away at the age of 64 on December 27.

Ken, who was born in Berkeley and raised in Willows, was the oldest of three children. He graduated from Glenn County High School in 1960.

From Engineering Aid II to Water Resources Engineering Associate, Ken worked on almost every portion of the State Water Project during his more than 45 years with DWR's Division of Engineering. In the 1980s, Ken was Office Engineer at North Bay Aqueduct Phase II Project Field Office in Fairfield.

"Ken was very knowledgeable in all aspects of construction from contract administration, management, and procedures to surveying, construction inspection, and material testing," said **Jim Brantley** of DWR's Division of Engineering.

Ken later worked for the Lancaster Project Headquarters Contract Administration Section. In the late 1990s, Ken worked as Office Engineer and Contract Administrator on the Coastal Aqueduct Phase II in San Luis Obispo County. Ken was instrumental in settling disputed work, preparing contract change orders, and other contract close out activities. After



returning to Lancaster Project Headquarters, Ken worked on East Branch Extension in San Bernardino and Riverside counties and the Tehachapi East Afterbay in Kern County.

"One project that he was especially proud of was the Barker Slough Pumping where he was the lead inspector," said **Bill Ashton** of the Division of Engineering. "I enjoyed working with him. He had a kind of gruff exterior, but it was belied by a dry sense of humor."

He received a Unit Citation in December of 1998 for the design and construction of the Coastal Branch Phase II project.

Ken has many friends and associate in DWR, and will be well-remembered.

Ken's nephew, Officer Robert Moore, remembers, "He enjoyed good food, good music, and good times. And for those who didn't like that, he'd say, 'Joke'em.' He also enjoyed reading, fishing, bird-watching and gardening. Ken planned to retire in February."

He is survived by his sister Katherine of Oakland, brother Richard of Cloverdale, two nephews, and two nieces. ■

Charles Dukes

Former DWR employee **Charles Dukes** passed away at 86 years of age on February 19 in his home in Dixon.

Charles worked for DWR's Division of Land and Right of Way for 38 years. As Land Agent, Charles helped acquire the majority of the land rights for the construction of the State Water Project facilities. He retired from DWR in 1982.

Charles, who was born in Collingswood, New Jersey, was raised in the east coast and attended school in Georgetown, Delaware, Augusta Military Academy at Fort Defiance, Virginia, Mercersburg Academy in Pennsylvania, and Muskingum College in Ohio. He also served in the U.S. Army Air Force

In 1957, he moved to West Sacramento and worked as Office Manager of Overhead Door Company. He later began working for the Department of Fish and Game until he joined DWR.

He is survived by his wife Martha, three daughters, and extended family. ■